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THE INAUGURAL ADDRESS.

THE ORIGIN AND DEVELOPMENT OF PLATO'S THEORY OF IDEAS.

By G. C. FIELD.

It has not, I think, been the custom in the past for those who occupied this position to choose a purely historical subject for their address. But I do not know that any particular apology is needed for such a departure from precedent. The History of Philosophy is a recognized branch of philosophical studies. And not only is it of interest in itself but a study of it, especially when concerned with the greatest figures of the past, cannot fail to exercise some sort of influence on our present thinking. Particularly is this the case with Plato. A study of his work reveals the fact that both the questions which interested him and the point of view which he adopted have far more in common with some of the philosophical tendencies of the present day than has the point of view of many much more recent thinkers. I know that, for my own part, I have found the study of Plato of far more value in clarifying my thought on most of the problems which interest me than that of any other single philosopher.

The subject which I have chosen is certainly a well-worn one. And to anyone who thinks that that fact calls for some apology I shall probably seem to intensify my offence when I say further

that I make no claim to offer any entirely new and original contribution to it. Indeed, anyone who did make such a claim would probably, and I think properly, be regarded with a certain degree of mistrust. It would be very poor testimony to our ability to understand Plato at all if, after so many years of work on him, all scholars had hitherto failed entirely to understand him on any point of first-rate importance. In default of the discovery of fresh material, it does not appear that any absolutely new suggestion of any value is likely to be made on a major point in Platonic interpretation. The Platonic scholar of the present day will, if he is wise, content himself with making a selection and a combination from among the many suggestions that have already been put forward. At the most, he can hope to restate and modify in detail interpretations which in their main lines are already familiar. But it would be extremely foolish to undervalue the importance of such work. Consolidating the ground already won is a task as essential as that of making fresh advances.

The Theory of Ideas or, as I should prefer to call it, the Theory of Forms, might seem at first sight the chosen battlefield on which most of the great differences of opinion on Platonic interpretation are fought out. But a closer inspection will rather suggest that the points on which general or almost general agreement has been reached cover a much wider ground than do the points still in dispute. Such difference as there is is much more often a question of emphasis and proportion than of diametrically opposed views. There are only a few points of importance in which such a direct difference of opinion is still maintained.

On one of the most important questions of all, what sort of things the Ideas or Forms are, substantial agreement seems very nearly in sight. Thus we may note the almost universal realization that, if we are to understand Plato, they must be looked at from a realist point of view. The Ideas are not ideas,

whatever else they may be. The interpretation of the Ideas as points of view or methodological postulates, still upheld by Natorp and his followers and represented in England I think only by Prof. Stewart, would find few defenders at the present time. It is indeed difficult to avoid the conclusion in reading the works of this school that their main case rests on the assumption that Plato must have meant this because this is what they themselves believe to be the truth. But it is not on such lines that an understanding of Plato can be gained. And all the direct evidence, both from Plato's own words and from his disciples, is diametrically opposed to such an interpretation.* It is certain that for Plato the Forms were real facts, existing in their own right, and there to be discovered by our minds. The fact that we could think them, or think anything about them, was a proof, *the* proof in fact, that they really existed. It was not even, for Plato, a suggestion that they might be, in any sense, constructed or created by our thinking. There is only one passage in which it is even suggested that the Forms might be thoughts (*νοήματα*)† and there the suggestion is immediately rejected on grounds which are at once accepted as convincing and decisive. Indeed the way in which the suggestion is introduced indicates that such a view had only flitted through Plato's mind, as a possible way out of certain difficulties, and that it was never very seriously maintained.

This realist approach is characteristic not only of Plato but of all Greek philosophy up to his time. The only exception to it that we know of is the relativism of Protagoras. But this is altogether outside the main stream of Greek thought and exercises

* The most thorough and convincing criticism of Natorp that I know is to be found in the work of Adolfo Levi, *Sulle Interpretazioni immanentistiche della filosofia di Platone*.

† *Parmenides*, 132B, *et seq.*

no influence on Plato except by way of repulsion*. Normal Greek thought, at any rate, up to this period, takes for granted the realist assumption that knowledge is necessarily of an object and that the object is not in any way affected by or dependent on the knowledge of it. It is by remembering this that we can judge the value of the phrase which, as applied to Plato, always excites the wrath of Prof. Burnet, about "hypostatization of concepts." If it means that Plato ascribed independent reality to what he ought to have realized was only a concept or construction of the mind, that is a matter of opinion, about which differences are legitimate. But if it means that Plato ascribed this to what his predecessors had only regarded as a concept, then it is a clear historical blunder. Whatever the novelty in Plato's theory was, it certainly did not lie in that. In my own opinion, such a phrase as applied to Plato is so likely to mislead that it is better avoided altogether.

The considerations which led Plato to a belief in realities of this kind are fairly clear. Different commentators may express them somewhat differently or lay emphasis on different aspects. But there is hardly any substantial disagreement. It is true that there are still people who talk and write as if Plato were moved simply by a sort of intellectual snobbishness which made him look down on the sensible world. But they are not Platonic scholars. For those who read him it is clear that his views are based upon the observation of facts. He was impressed, in the first place, by the fact that in scientific, particularly mathematical, thinking, we make judgments which appear to us to be absolutely and unqualifiedly true, about facts which are

* He appears to go a certain way towards it in his theory of sensation, in which there is certainly for him a subjective element. But it is precisely for that reason that he denies it the title of knowledge, and he appears to think that such an objection, if properly understood, must appeal to anyone.

clear and coherent, with determinate characteristics, not depending upon circumstances nor changing from moment to moment. Whereas the particular sensible objects, which we touch and see, do not admit of absolute and unqualified judgments being made about them. Their characteristics are never completely determinate. they vary with the circumstances or point of view and change with the passage of time. It was the obvious fact that we could not find the mathematical straight line in a visible form and that we could not find the absolute mathematical One among sensible objects, any of which was only one from one point of view and many from others, and that yet we could make judgments, which we could not doubt were true about such facts, which impressed itself from the first on Plato's mind. Whenever we find anything approaching a proof of the Theory of Ideas in the dialogues it takes that form. Because there is knowledge, *i.e.*, absolute scientific knowledge of the kind expressed in mathematical judgments, there must be facts in reality which are the objects of such knowledge. And because such knowledge and such judgments are of a different character from the relative truths and the rough approximations of our judgments about sensible objects, then such facts must be of an essential, & different nature from sensible objects.

Further, our judgments about sensible objects may be only relatively and approximately true, because such objects only have relatively and approximately determinate characteristics. But they have none the less some degree of truth, just in so far as their objects have some degree of determinate character. The two spheres are not entirely out of relation to each other. The world of sense seems to approximate to or to have some share in the definiteness and determinacy of the objects of scientific knowledge. We speak of the thing we draw as a straight line, though it is not absolutely a line and not absolutely straight, and the facts that we could prove about a geometrical

straight line would be nearly true of the approximation to the straight line that we draw. Such an illustration* shows how easy it would be to think of the objects of scientific or mathematical knowledge as complete and perfect forms of that towards which the particular sensible objects are approximating without ever being able to attain completely. It would need only a little step in the way of personification or metaphor to speak of them as ideals which the particular objects were trying to reach.

But there is one sphere, and one which particularly interested Plato, in which that way of speaking would cease to be a metaphor. That is the sphere of moral endeavour, in which we naturally regard human beings as striving towards an ideal of goodness which they can never completely attain. And if we are serious in our belief in morality at all, we must regard this ideal, not as an arbitrary construction of our own minds, but as something determined by the nature of reality, which we are not free to make up into any form that we fancy at the moment. The moral judgment, just as strongly as the mathematical judgment, seems to point to an ideal form in reality, which can never be completely attained by particular sensible beings.

I have dwelt on these considerations, which will probably seem familiar and even elementary to most of those present, in order to emphasize the point that the Theory of Ideas was a perfectly natural and plausible explanation of certain obvious facts. We are not bound to accept it as a finally satisfactory explanation, as long as we realize that it was not a mere figment of Plato's imagination but a serious and reasoned attempt to account for these facts. I do not know how far it is necessary

* We might, perhaps, illustrate it further by the mathematical conceptions of absolutely rigid bodies or pure fluids. I find, in general, that mathematicians and mathematical physicists of the present day find it very easy to appreciate this aspect of Plato's thought, and to recognize its kinship with their own.

even to mention this to an audience of philosophers. But it is certain that it would be unnecessary in an audience of Platonio specialists, who might not all express themselves in exactly the same way, but who would without doubt be in agreement on the substance of this statement.

When, however, we come to consider, not the philosophical basis, but the historical affiliations of this doctrine, unfortunately agreement ceases. For here we are brought fact to face with the great Socratic controversy, in which the protagonists on either side still appear quite unconverted. Even, here, however, if we confine ourselves to studying their accounts of their own views and do not pay too much attention to what they have to say about each other's views, we shall find that the area of agreement is much wider than it seemed at first sight. But none the less some treatment of this controversy is necessary.

I would suggest that, for our present purposes at any rate, the most fruitful line of approach is to ask first, not what Socrates believed and taught on this or that point, but what was Plato's intention and attitude of mind in writing the dialogues. That any answer to such a question must be largely a matter of conjecture may be admitted. And yet it is necessary to make some conjecture. Anyone who discusses the subject at all finds himself obliged to assume one view or another on this point. And it is highly desirable that the view assumed should be made explicit. I hope I may be forgiven if I confine myself here to stating my own assumption on the matter. I call it an assumption because it has to be recognized that it does not admit of scientific proof. But it is not an assumption in the sense that it is adopted unconsciously without examination. I have tried to discover everything that could be urged against it. And if I continue to hold it it is because I can find no serious objections to it, and because it, more than any other assumption, enables me to form some kind of picture of the development of Plato's

mind which appeals to me, at any rate, as coherent and convincing.

General probabilities, the nature of the literary medium used, what we know of Plato's own interests and the tradition of antiquity seem to me to combine with many minor details to suggest that Plato's primary aim in his literary activity was to meet the needs of his own time and to produce something which would have a useful bearing on current difficulties and controversies. This means that, if a dialogue suggests a particular line of thought, he regarded that line of thought as valuable, and if it inculcates a positive point of view, he regarded that point of view as true. It does not mean that the dialogues, even taken together, constitute a compendium of Platonism. Indeed, it really excludes such an interpretation. They are not intended as a systematic presentation of a complete philosophy. They are rather occasional essays, in dramatic form, on particular topics of interest, suggested, I have no doubt, in most cases, by some current controversy or discussion. As such, they cannot be expected to reveal the whole of Plato's thought. Each dialogue is a dramatic whole, with a plot and a purpose of its own, and the exigencies of the particular argument and the particular literary form will dictate many omissions and many special turns of phrase and modes of expression. I cannot help thinking that this is too often forgotten by scholars of all parties, when they try to extract a profound significance from the fact that one dialogue is silent on a point which is mentioned in another, or that the mode of expression in one dialogue is rather different from that used in a similar connection in another.* All such points

* An instance of the kind of thing I have in mind may be found in the attempt that some critics have made to extract significance from the fact that holiness is mentioned as one of the principal virtues in the *Protagoras* and not in the *Republic*. Or, again, there is the fact that he does not speak of the soul in every dialogue in terms of the tripartite

would be determined by the particular object of the particular dialogue. On the other hand, if Plato's main purpose in the dialogues was as I have suggested, it is in the highest degree unlikely that he would allow himself to be further restricted by any demand for detailed historical accuracy, if such a demand would have stood in his way. If he did, one could only conclude that he had made a very unfortunate choice in his literary medium.

If we admit that in this sense the dialogues represent Plato's own point of view, we may then, if we choose, go on to the further question, how much of this point of view was identical with that of Socrates and derived from him. It is, indeed, a question which more directly concerns our account of Socrates than of Plato. But, in any case, it is a problem which, in the absence of direct literary evidence, is not precisely soluble. Even to ask it may be misleading. It may be taken to suggest the mistaken assumption that a philosopher's beliefs may be separated out into clearly distinguished parcels of doctrine, and that we can say that this parcel comes from Socrates, this from the Pythagoreans, this is original, and so on. In reality any philosophical belief that we really believe is our own. Even if it is first suggested to us by someone else, in adopting it we take it up into our own thought, we think it over again for ourselves, combine it with the rest of our beliefs, and in so doing give it a form and colour of our own. As anyone will testify who has had the experience of forming his own beliefs after being affected by the influence of another thinker, it is generally very difficult or even impossible to say with any degree of precision what we have learnt from someone else and what we have thought out for ourselves. I do not suppose Plato himself could have drawn a precise line, or indeed that he would ever have bothered to do

division of the *Republic*. Other instances, specially connected with the Theory of Forms, will appear in the course of the discussion.

so. As he himself says, or makes Socrates say: *πάντως γὰρ οὐ τοῦτο σκεπτεον, ὅστις αὐτὸ εἶπεν, ἀλλὰ πότερον ἀληθὲς λέγεται ἢ οὐ.*

There is, of course, no question that Plato was profoundly influenced by Socrates and that he was fully conscious of this himself. The choice of Socrates as the chief figure in most of the dialogues is sufficient testimony to this. But this need not lead us to doubt that Plato's primary object was always to make a contribution to the solution of the problems of his own time. A simple explanation of this, as it seems to me, would be to suppose that when Plato began to consider seriously the conditions of his own time, he felt that what was chiefly called for was an application of the spirit and method of Socrates to these problems. Even so, it would be Socrates as Plato understood him. But as he went on, if his chief aim was still to give the world what it needed, he would certainly not hesitate to draw out what might seem to him implicit in the teaching of Socrates, even if Socrates had never explicitly taught it. He would hardly know, or perhaps care, at what exact point this began. And because it was a continuous development, there would be no reason to change the literary form which had served him so well. And having gone so far there would be nothing surprising if he still chose to retain this form, as indicating that he remained constant to his conception of the spirit and method of Socrates, even when he became conscious that the actual views developed went far beyond anything that Socrates had even thought. But it is only occasionally, and by a happy accident, that we can get any evidence as to when Plato himself thought such a point had been reached. And our uncertainty on such a point need not make us doubt our ability to understand Plato's own thought.

I certainly do not wish to be understood as doubting the value of historical research into the relations of the thought of one philosopher with that of others. On the contrary, it seems

to me of the highest importance to realize that Plato is not an isolated figure, a kind of philosophical Melchizedek, thinking out all his problems by himself alone and unaided. We cannot begin to understand him unless we think of him as a real man living in a world which was full of discussions of problems, philosophical and political, in which he was keenly interested. If we could discover more of the kind of discussions that were going on among Plato's contemporaries, we should probably get a far fuller understanding of the dialogues than is now possible. I think that such knowledge would be more helpful than the closest study of his philosophical predecessors. Not that that is without value, but it is apt to open the door to a certain danger of explaining away a thinker entirely in terms of the past. It is certain, of course, that many arguments and expressions which we find in Plato can be paralleled from earlier writers. No doubt if more of these writers had survived we could find even more parallels. This, indeed, is the case with all great thinkers. Originality never attains the point of conceiving an idea of which there has been no hint or suggestion before. It consists rather in formulating the precise point to which the discussion and research of the time are tending. Very often when we look back it may seem so obvious that that was their direction that we feel inclined to doubt the originality of the first person who clearly formulated it. But to do so would be a great mistake.

To return to the special case of Plato. The only hint that we can get as to the point at which he himself was conscious that he was passing beyond what had been suggested by others is to be found in the statements of his disciple Aristotle. It is, on general grounds, highly probable that Plato would have given some indication to his pupils of the relations of his own theories to previous thought. We cannot tell with certainty how far Aristotle is to be relied on in his report on such a point.

But we have no other evidence that can rival this in value and importance.

Now Aristotle is quite clear on the point that Plato owed much both to Socrates and to the Pythagoreans. But he is equally certain that he made some original developments of his own. And the first, and for our immediate purposes, most important point of originality lies in the *χωρισμός* or separation of the Forms from the particulars. I remain entirely unconvinced by all the ingenious efforts of modern commentators to find some particular obscurity or mystery in the meaning of this word. To me it seems to apply, simply and obviously, to that point about the Forms which we have already been discussing. Indeed Aristotle paraphrases the word by almost exactly the same phrase as Plato uses of the *αὐτὸ τὸ ἴσον* and its relation to the particular things that we call equal, in the *Phaedo*.^{*} It seems clear, then, that by "separation" Aristotle refers to the view that the Forms were not merely something in the particulars and were not dependent on them for their existence. In fact, they were not strictly and literally "in" the particulars at all, but were rather ideal limits or perfect forms to which the particular sensible objects might approximate without ever quite attaining.

That, then, is to be taken as the essentially original contribution made by Plato. Others may have used the word *εἶδος* or believed in the reality of the universal and its importance for knowledge. But the definite formulation of this view was Plato's own. No doubt it would be possible to find plenty of suggestions of it. It might be regarded as implicit in the mathematical studies of the Pythagoreans. But Aristotle is quite clear that they did not hold it explicitly. He contrasts Plato's views with

^{*} *Phaedo*, 74 a. Παρὰ ταῦτα πάντα ἕτερον τι αὐτὸ τὸ ἴσον.

Metaphysics, 1086 b. 1. Τὸ δὲ καθόλου παρὰ ταῦτα εἶναι τε καὶ ἕτερόν τι εἶναι.

theirs on this point, and says that they held that things were made of numbers. It is true that he speaks, in one passage only, of their view that things imitated or were like numbers, and it is not perhaps easy to reconcile the two descriptions. But the first formula is the one on which he lays all the stress. And even the latter by no means necessarily involves the particular Platonic view.

Similarly, one could hardly suggest that Plato was the first person to see that moral ideals were not fulfilled in particular cases. But one can suggest that he was the first to generalize this and to maintain that this was the very essence of the nature of moral ideals. And that leads on to a further point of great importance, which seems to me one of the most essential features of Plato's originality. That is, he was the first who expressly and definitely assimilated the status of moral ideals to that of objects of scientific thought, and realized that the two could be brought under the same formula. I picture Plato as interested primarily to begin with in the establishment of moral standards, and the search for definitions as a necessary condition of clearness of thought in that sphere, on the lines suggested by Socrates. Then, doubtless in the main through his acquaintance with the Pythagoreans and his mathematical work, he begins to reflect on the nature of scientific knowledge. And the revelation comes to him when he first sees that in the objects of mathematical thinking he is face to face with just the same kind of entities as he is seeking to establish in the moral sphere, and that there are therefore just the same reasons for believing in the reality of the one as of the other.

The details of this, of course, are conjecture. But what does appear certain is that one of the most essential points about the theory was this twofold aspect of it. It began as an attempt to answer the two questions: What are the objects of scientific knowledge? and, What is the nature of moral standards?

And the vital point about it was that it claimed to find a common answer to both questions. This, it seems certain, was in its complete form an original thought of Plato's, though doubtless almost any particular point in the theory could be paralleled in the work of his predecessors.

It might be thought that, in addition to these problems, Plato was also influenced in the same direction by his desire to find an answer to the specially logical problem, What is the nature of predication? It is certain that Plato was greatly interested in this question at some period of his life. It is equally certain that his own contributions to the development of logical theory were of first-rate importance. He was in all probability the first person who succeeded in stating the nature of predication in a way which solved the long-standing difficulties in the subject which had been the stock-in-trade of the sophists and dialecticians. But it does not appear, though the indications are not perfectly decisive, that it was this kind of investigation which led to the first formation of the Theory of Forms. Certainly the dialogues which contain his most important contributions to logic are to be placed in the later period of his activity. And these contributions, though they naturally use the terminology of the Theory of Forms, appear to be, strictly speaking, independent of Plato's special views of the nature of the Forms.

Such is the outline account I would give of the origins of the Theory. When we come to consider the problem of the ways in which it was developed, and possibly modified by Plato as time went on, we are once more faced by serious difference of opinion. We can recall all manner of discussions on the lines of Plato's later Theory of Ideas *versus* The Unity of Plato's Thought. Yet even here progress must be recognized. We have not reached agreement. But we have moved nearer to it by reducing the number of rival views. There are some suggestions

that have been put forward in the past which need no longer be seriously discussed.

Of course, as far as general probabilities are concerned, we should expect, at least, some development and modification of the theory in the course of thirty or forty years. We need not, then, strain the interpretation of any particular passage in one dialogue in order to make it agree with a passage in another dialogue of a different date. In particular it is dangerous to use what we know of later developments in order to interpret passages in the earlier dialogues. The more pressing danger, however, is in the other direction. That is, the danger, of which I have already spoken, of forgetting the occasional character of the dialogues and their individuality as dramatic unities, and taking all differences of phrasing as a sign of change of opinion. Even more dangerous is the habit of arguing *ex silentio*. It is hardly ever safe to extract any significance from Plato's silence on any particular point in a dialogue unless we can show beyond a doubt that a mention of it would have been inevitable, if he had still believed in it. A case in point is the *Theaetetus*. It seems to me quite clear that the *Theaetetus* is a critical essay on current theories of knowledge. And a very brilliant essay it is. But it is the most natural thing in the world that in an essay written for publication to the philosophical world of the time he should not wish to make his criticisms depend upon his own special metaphysical theory, but should try to base them on considerations which would appeal to the general reader. There is no significance, beyond this, in the silence of the *Theaetetus* about the Forms. We must never think of Plato as obsessed by this one aspect of his thought, and writing all the dialogues with that in mind alone.

One crucial point in the discussion of the development of Plato's thought lies in the interpretation that we give of that strange dialogue, the *Parmenides*. It is generally agreed that

in all the dialogues written previously to this the presentation of the Theory of Forms is substantially the same, except for possible slight differences in details. But the *Parmenides* is often regarded as marking a turning point in the development of the theory. The subject of the dialogues is, of course, well known. It consists, in the first part, of a series of difficulties found by Parmenides in the account of the theory of Forms as given by Socrates, who appears as a very young man. In particular, the difficulties refer to the relation between the Forms and the world of sensible particulars. No definite conclusion is drawn from this. But it is followed by the much longer second part in which Parmenides produces a most extraordinary series of dialectical arguments about what follows if you assert the One, if you deny the One, and so on. It ends with the conclusion that, whether the One is or is not, both itself and the others in relation to themselves and to each other in every way are and are not and appear and do not appear. There the dialogue ends abruptly. No further explanation is given of what Burnet calls "this portentous conclusion," and no suggestion is made of what we are to suppose follows from it.

How, then, have modern critics explained the dialogue? Its interpretation has probably led to greater diversity of opinion than any other Platonic problem. And even at the present day there is probably not a single point on which opinion is absolutely unanimous. But there are two points on which the great majority of commentators seem agreed. One is that the criticisms of the Theory of Forms put into the mouth of Parmenides either come from the Megarians, the contemporary representatives of the Eleatic doctrines, or were at least suggested by them, or conceived under their influence. And the other and more important point is that the theory criticised is in its essential features the theory of the previous dialogues. But we are much

further from unanimity when it comes to the question of the significance of these criticisms.

The opinion which is probably still the dominant one is that Plato regarded these criticisms as really serious, so serious, indeed, that they necessarily required some modification and restatement of his doctrine. The lines on which such modification should proceed are suggested, somewhat obscurely, it is admitted, in the second part of the dialogue. And the modified form of the doctrine must be apparent henceforth in the subsequent dialogues. This seems to be still the belief of the majority of critics. But when it comes to the further question of what the modifications are which the criticisms require and the second part indicates, then once more the widest diversity of opinion appears. I do not propose to discuss these interpretations.* This diversity and the impossibility which they suggest of arriving at agreement on the subject are among the considerations which embolden me to range myself with a minority of scholars in rejecting the common assumption of all these theories.

On the view which I would maintain, the first part of the dialogue does summarize arguments and criticisms that had been suggested by the Megarians. But they were not ever regarded as serious objections to his doctrine by Plato. Nor, indeed, are they. They consist, as it seems to me, simply in pressing the literal meaning of phrases which are necessarily metaphorical. They may be regarded as pointing out the defects of the language which we have available. But they cast no kind of doubt on the reality of the facts which it is intended to express, as Parmenides himself seems to hint. Plato's reply to these criticisms is to be looked for in the second part.

* Reference may be made to Jean Wahl's "*Étude sur le Parménide de Platon*," the most recent complete work on the subject known to me, in which an account of the different views put forward may be found.

But not at all in the way suggested in the rival views. It must rather be regarded as a parody of the Megarian dialectical methods applied to their own favourite doctrine of the One, and ending up in a conclusion which would be entirely unwelcome to them. But this does not mean that Plato thought that the arguments in the second part were really conclusive. In fact, it is difficult to believe that he did not himself see how sophistical some of them clearly are. They rest on just the kind of fallacy that is exposed in the *Sophist*. In that dialogue, I believe, we do have in a sense, an answer to the difficulties of the *Parmenides*. But it does not consist in any modification of the Theory of Forms. It consists in the beginning of the work on logic and the nature of predication which would make the Megarian methods of argument impossible for future thinkers.

I have not space to go into the points in the dialogue itself which tell in favour of the view I am maintaining,* nor to consider the points, much fewer and less serious, as I believe, which could be urged against it. I will go on to what ought to be the really decisive question. Can we find in the latter dialogues or in the account of Aristotle any certain evidence of a modification of the theory on the lines suggested in the *Parmenides*? There are certainly signs of modifications, or at any rate, further developments of the doctrine. But they seem to me to have little if anything to do with these difficulties.

Thus, there is no sign at all that there is any change in the view of the relation of the Forms to the particulars suggested in the earlier dialogues. They are still and always the ideal or perfect forms to which sensible things approximate without

* They may be found in the works of Prof. Burnet and Prof. Taylor. It was by the work of these scholars that I was first convinced of the truth of the view I am maintaining above, though they are not, of course, responsible for the details of my formulation of it, which differs in some respect from the account given by Prof. Burnet.

ever reaching, and they are still the objects of perfect scientific knowledge as opposed to the opinion and sense perception of the particular world. The brief presentation of the doctrine in the *Timaeus* is almost exactly the same as that in the *Republic*. Nor are there the slightest signs that Plato ever gave up talking and thinking about participation or imitation or any other of the phrases which are particularly criticized in the *Parmenides*. Aristotle tells us that the former was his regular word for the relations of Forms and particulars in the final stage of his thought. And the *Timaeus* shows that he did not hesitate to use the latter if it was more suitable to the form of a particular dialogue. We may, by the way, regard as finally disposed of the suggestion that he regarded the two as rival and opposed expressions, indicating a different view of the relation that had to be described, and that he ever passed from one to the other. The evidence of the earlier dialogues, in which the two are used indiscriminately, confirms the evidence just cited for the view that they were regarded as alternative expressions for one and the same thing, either of which could be used as seemed appropriate to the particular passage.

The problem that did exercise Plato's mind, as we can see beyond a doubt from the later dialogues, was not what the nature of the relation between Form and particular is, but how it comes to be in any particular case. And, when it has come into existence in any particular case, how does it come to change and the particular object to participate in another Form or even cease to exist altogether? It is the problem of change or of becoming, to use his own phrase, which interests him. The Forms cannot give an explanation of this: they themselves represent the principle of permanence. For the principle of change we must look in another direction. And he finds it, as we see from the *Sophist*, the *Philebus*, the *Timaeus*, and the *Laws*, in the activity of soul or mind in the universe.

What sort of change of view does this represent? How far, indeed, is it a change at all? There is certainly nothing in the doctrine which would surprise a reader of the *Phaedo* and the *Phaedrus*. But it is not expressly stated in any dialogue earlier than the *Sophist*, and in the *Phaedrus* the presence of soul is rather suggested as the mark which distinguishes animate objects from the rest of nature. Aristotle certainly understood the *Phaedo* as finding the explanation of change in the Forms themselves. But that is not the impression one gets from reading this and other dialogues. Rather does change seem to be regarded as something inherent in the nature of sensible objects a sign and result of their material nature and therefore a mark of imperfection and unreality.

I imagine that what made Plato carry his thought on this point further was the consideration that the mere fact of being material or sensible could not explain why any particular change took place, this change rather than that, still less why, in some cases at any rate, we could observe order and regularity and system in the changes. Possibly he did think, at the earlier stage of his thought, that the mere fact of the relation to the Forms was sufficient explanation of this, and this may be what Aristotle refers to. I cannot, however, think that this was a definite opinion. The earlier dialogues suggest rather that, if he thought this, it was assumed without examination, and that more probably he had not raised the question expressly at all. When he did, he came to the final conclusion that change, so far, at any rate, as it was determinate change, was the work of soul or mind. The soul or mind working throughout the physical universe, initiating and controlling all change and movement, is what he speaks of as God.

We may pause here to note that nothing in the *Parmenides* could possibly be regarded as pointing in this direction. This is not the kind of difficulty that is raised there at all. The favourite

suggestion of those who try to find a serious meaning in the second part is that it means that the Forms and particulars are not to be regarded henceforth as absolutely disparate, but as mutually involving each other and necessary to each other. But such a suggestion is obviously the exact opposite of the development that we are now considering. For that, so far from regarding the relations of Forms and particulars as following necessarily from their own nature, finds it necessary to bring in mind to explain why they come together in any particular case. Whether it is strictly correct to say, as one distinguished scholar does, that these later developments make the Forms more transcendent than the earlier view, seems to me doubtful. It is certainly nearer the truth than the opposite statement. But it might be taken as obscuring the fact that the development is not in the view taken of the nature of the relation between the Forms and the particulars, but in the account given of how that relation comes to be in particular cases. And the development, probably, consists rather in raising further questions than in changing any explicit conclusions arrived at before.

This view of the place and function of soul appears in the *Timæus* as part of a complete account, in more or less mythical form, of the elements which go to make up the physical universe. Into the details of this and the many vexed questions of interpretation we are not called upon to enter here. But on one point a word must be said. The *Timæus* quite clearly and obviously represents soul or God and the Forms as distinct and co-ordinate elements in reality, neither of them dependent on or reducible to the other. But the activities of God are, in a sense, dependent on or determined by the Forms, because His knowledge of the Forms gives Him the ideal or aim for His activity in the physical world. Therefore, in this special sense, God may be regarded as subordinate to the Forms. But He remains a distinct entity, not in any sense dependent on them for His

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reality. Still less are they dependent on Him. The idea of the Forms as the thoughts of God is a suggestion of later commentators and finds no warrant in the text of Plato.

Now there really seems no reason at all for not taking Plato to mean what he says. There is no passage anywhere in his writings which supports the attempts which have been made to reduce in some way one of these ultimate realities to the other. And one has only to read the writings of those who have made such attempts to see that their main motive has been to make Plato say what they think he ought to have said, rather than to understand what he actually did believe.

There is another development, of which we know directly only from Aristotle. But we can see from the dialogues the preliminary considerations which led in that direction. The distinction between knowledge and opinion was always fundamental for Plato, and he never wavered in his belief in this. But he began to see quite early, perhaps from the beginning, that this distinction was not final and sufficient, but that further distinctions could be made within these two realms. The characteristics of knowledge were more completely shown at one stage than at another. In the *Republic* we see that the particular mathematical sciences, if treated as independent branches of knowledge, do not attain the fullest and most complete knowledge that is attainable. They are incomplete and insufficient, because they have to take certain things for granted, and do not go beyond them to the final cause and explanation of all. The classification of the sciences or kinds of knowledge in the *Philebus* is an essay in the same direction. All these, however, make the intermediate stages a matter of more or less complete knowledge of the same order of objects. Plato's final stage, according to Aristotle, involved the recognition of an intermediate class of entities, the mathematical, between the Forms and the particulars. The special reason

given for supposing these to exist is simple. In many operations of mathematics we deal with more than one of the same kind of thing. Two circles cut one another, or two and two are added together to make four. The propositions proved about such things are certainly not proved about particular sensible objects. But they equally cannot be true of the Circle-in-Itself or the number Two, each of which is a single and unique entity. Therefore there must be intermediate objects of which such propositions are true. We know nothing further of how Plato described their relation to the Forms on the one side and the particulars on the other.*

This brings us to the best known and most discussed of the points in Plato's view, the knowledge of which we owe to Aristotle. That is the doctrine that the Forms are numbers. Aristotle is really quite unequivocal on this point, and there is no doubt that he means us to believe that Plato absolutely identified the Forms with numbers. Nor is it at all likely that he could have been mistaken on a point of such importance. We cannot say that it is impossible. But we should need very strong evidence, much stronger than any that we have actually got, to justify us in doubting his statement. There is, strictly speaking, no positive evidence at all in this direction. The only fact which calls for explanation is the entire silence of the dialogues. If it were only a question of the earlier dialogues, it would be a simple

* Mention must be made of the alternative view, according to which Plato did not include numbers in any sense among his intermediate mathematical, but indicated by these geometrical figures only, which, as we shall see below, are regarded by him as in some sense intermediate between the Forms, conceived as numbers, and the sensible particulars. This is the view of Prof. Taylor and is undoubtedly attractive. But somebody certainly, according to Aristotle, did believe in mathematical numbers as well as Form-numbers. And I am not convinced that this does not refer to Plato, though it is true he is never definitely named in this connection.

matter. For the doctrine is undoubtedly a later development of the original theory. But it is somewhat curious that even in the writings of Plato's later years there is no explicit statement of such a doctrine. Yet it must have been developed and expounded by Plato at the time he was writing these works. And some of these writings must be admitted on any theory to represent Plato's own point of view. In the *Philebus* and the *Timæus* there are places in which such a doctrine might have been mentioned. And if even these are not allowed to represent Plato's own views, a contention that would be hard to maintain, we have the obscure metaphysical passage in the Seventh Letter, which seems to be speaking of the Forms—it certainly mentions the Circle-in-Itself—and yet gives no hint of their numerical character.

The fact that the old way of speaking about the Forms can go on side by side with the new development raises no real difficulty if we realize that the new theory of the Forms as numbers is not a revolutionary change of opinion, but simply one more development built up on the substructure of the old theory. And, understood like that, we can see nothing to surprise us in the new development and can, indeed, find plenty of hints in the dialogues which might lead us to expect something of the kind. We know that, from the first, mathematical objects and relations are among the most obvious instances of the Forms and that the knowledge of them appears as the type of clear and distinct scientific knowledge. Later we have constantly emphasized the importance of exact measurement and precise numerical statement as the goal of scientific research. Such a line of thought must have influenced Plato when he began to ask—at what point of his development we do not know—what the characteristics of Forms must be. He could not be content to think of them merely as the Forms of this or that sort of thing, and to define them by their relation to the particulars,

i.e., as the ideal form to which the particular things were approximating. This would make them little better than a kind of unknown essence, and it was essential to his notion of them that they should be objects of scientific knowledge in themselves. They must have a describable character of their own. And where could that be found except in their numerical nature ?

The particular way in which Plato applied this is suggested most clearly in the *Timæus* and in the *Epinomis*. In the former dialogue the differences between the different objects lie in the proportions of the four elements mixed up in them. And the essential distinguishing features of the four elements lie in the geometrical shape of the particles which make them up, so that ultimately all the differences between various kinds of material objects are reducible to geometrical differences. But geometrical shape still includes in itself some element of space, which is the essential characteristic of material objects, and so is not a completely satisfactory object of pure scientific knowledge, entirely independent of sense perception. And, when we read in the *Epinomis* that geometry is truly only a way of symbolizing certain numbers and numerical relations, we see where to look for the ultimate reality, the non-sensible element, which is known by the pure reason alone. We can still, of course, speak of the Form of this or that kind of thing, i.e., man or ox, to use the examples of the *Philebus*. But if we want to describe what any Form is in itself, the true answer could only be given as a numerical or mathematical formula.

About how Plato applied this conception in detail and what specific formulæ he gave for the different Forms, we have hardly any knowledge. Indeed, the impression that we get from Aristotle is that, except on one or two points, Plato's own associates were equally in the dark.* We sometimes get the

* Perhaps the most definite information that we can get from Aristotle is to be found in the *De Anima*, 404, B. 18. Another passage from the

impression that he laid down this as the ideal of knowledge, but that he did not profess to have attained it himself, except in very few cases. What these cases were, if any, we cannot discuss here. We may turn to the question which seems to have agitated the minds of the commentators considerably more than it did that of Plato, to what kinds of objects Plato ascribed Forms. The final answer to such a question must necessarily be looked for in the light of the doctrine just discussed, and might be put in the form: What kinds of objects could conceivably be regarded as describable by a mathematical formula? We know from Aristotle that Plato assigned a Form to all natural kinds, which is what we should have expected. He also tells us that "we" (the Platonists) do not admit Forms of manufactured objects or relatives (*τὰ πρὸς τι*, whatever he may have included under this head) or negatives. But it is not at all certain how far this represents the view of Plato himself.

The evidence from the dialogues is uncertain and even contradictory. The *Parmenides* suggests that doubts were felt about there being forms of certain natural objects. On the other hand, in the *Republic* it is stated that a Form is to be posited wherever several things are called by the same name. Possibly the *Parmenides* is intended to represent the earliest stages of the doctrine, which might have been already modified on some such points before the dialogue itself was written. But, in any case, the remark in the *Republic* is isolated and casual, and the general impression of the *Parmenides* is that Plato had never really faced the question seriously. No positive conclusion on the matter emerges from that dialogue, except that judgment on such a question must not be dictated by popular and conventional estimates of the value and dignity of any particular class of

Metaphysics, 1090, B. 21, is significant for the suggestion (*ἵσως*) that Aristotle himself was not quite clear how Plato or his followers would apply their numerical formulæ.

objects. There is no other discussion of the subject, except by implication in the *Politicus*, where it is made clear, in discussing the rules of correct division, that we cannot regard as a natural division or class any casual collection to which we choose to apply an arbitrary common name.

The only suggestion that I can make is that we should put the question in the form suggested above and try to imagine what general notions Plato could possibly have thought were expressible in mathematical formulæ. We can easily see how this would apply to natural kinds. It would also be applicable to moral qualities, so far as these can be thought of as consisting in a proportion or balance of different elements. We have good evidence for believing that Plato identified the Good in some sense with the One or Unity. But that seems to be connected with the doctrine about the structure of the Forms, which we shall have to consider directly. I do not think it possible to arrive at much greater certainty on these points. One crux in Platonic interpretation that it suggests, however, may be mentioned. That is the interpretation of the μέγιστα γένη in the *Sophist*. These are spoken of in the terms used of the Forms, and yet it is very difficult to see how they could be thought of as numbers or as expressible in mathematical formulæ. They appear much more as general characteristics of or relations between different objects, numbers or particular things, than as independently existing objects of scientific knowledge. I leave the difficulty for others to discuss.*

* A point of special interest in the *Sophist* and the dialogues most closely connected with it is the hints that they contain of the development of a logic independent of the Theory of Forms. The independence is suggested by the use of some of the technical terminology of the Theory of Forms in a somewhat different sense. Thus δόξα appears as the technical term for a judgment, the unit of thought, no longer as the correlative or opposite of ἐπιστήμη. Εἶδος, in the *Philebus*, is clearly used

Another problem on which a word should be said is the problem of the relations of the Forms to one another. Aristotle is always complaining of the difficulties in understanding this, particularly when it is a question of the relation of the Form of a genus to the Form of any of its species. We can see from the *Philebus* that Plato thought that it was the essential nature of a Form to differentiate itself in some way into sub-divisions or sub-species, each of which has, presumably, its own Form. That is, there is a hierarchical relation between Forms. How this is to be expressed in terms of the theory of Forms as Numbers we cannot attempt to say. What needs to be done, however, here is to protest against the view that this is an entirely new departure in the later dialogues, and that in the earliest dialogues in which the Forms are mentioned they are regarded as all absolutely separate and independent, having no necessary connection with each other. Though the evidence is scanty, it seems, as far as it goes, decisively against such a view, and there is no positive evidence in its favour. The Form of Three in the *Phaedo* necessarily involves the Form of Odd. We hear in the *Republic* of the Forms being each one and yet becoming many "by communion with actions and bodies and *with each other*." The obvious and natural interpretation of that is that the Form of a genus becomes many by communion with the Forms of its species. And, of course, the Form of the Good in the *Republic* has a very special relation to the other Forms. Altogether it seems to me certain that any development in this direction is only working out in precise detail an idea which is clearly present from the beginning.

Before ending an argument which has already gone on too long, I must say a word about the last development of Plato's

in the Aristotelian sense as a subdivision of a larger class, without any of the special implications that we naturally find in the word. This subject is worthy of further investigation.

doctrine of which we know anything. That is the theory that the Forms or Numbers themselves are susceptible of analysis into elements. And these elements, the One and the Indefinite Dyad, have a relation to each other analogous to that between the Form and the particulars of any class or species. Even in antiquity this doctrine was found obscure. And there is no less reason to find it so to-day. It has recently been subjected by Prof. Taylor to a careful and penetrating examination in the pages of *Mind*. But I think it would be premature, even if I had the space left, to attempt to pronounce on his results. There are, however, one or two points which must be mentioned. In the first place, the same point must be made as was made in other connections. This doctrine carries the analysis a stage further. But there is no suggestion that the further analysis alters or modifies in any way the results hitherto obtained. The main features of the Theory of Forms are left unaffected by it.

One of the chief points of interest about it is as indicating the character of Plato's interest in the later years of his life. It is fairly clear that the doctrine itself is a consequence of the belief that the Forms were numbers. That is to say that it is arrived at by reflecting on the nature of Number, not on the special problems which originally led to the formation of the Theory of Forms. It seems probable that, when Plato had arrived at the general conclusion that the Forms must be numbers, he ceased to concern himself with the application of this to particular cases or to attempt to say what numbers corresponded to the different general terms that we use. Instead, he turned to an investigation of the general nature of Number and the construction of a philosophy of Mathematics. His contributions to this were undoubtedly important. Prof. Taylor thinks that he came near to anticipating some of the most valuable results of modern mathematical philosophy. But our evidence

is so scanty that it is difficult to regard this as proved. At any rate, it is clear that this was the final point of his thought. But what ought also to be clear is that the final stage is an addition to, not an alteration of, what went before. And its extreme difficulty and obscurity should not make us despair of understanding the rest of Plato's thought. 111913

That is really the conclusion of the whole matter. I have tried to represent Plato, in the first place, as arriving at the formulation of his original theory as a perfectly reasonable and natural explanation of comparatively simple and familiar facts. The subsequent developments of the theory, which naturally extend over a far wider ground than its original form, seem to me all to arise naturally and logically from what went before. I can detect no revolutionary change, no definite abandonment of a view once explicitly and consciously arrived at. On all the main points, it seems to be a question of building up on a foundation securely laid. That is the main thesis that I would wish to establish. I am well aware that it would be absurd to imagine that it could be established within the limits of a paper such as this. But I hope that such an indication of the lines on which I would proceed may be of interest to some of those here. And I hope still more that it may excite criticisms and suggestions from those from whom I should be most glad to receive them, and that such comments may help me when, if ever, I am in a position to attempt to establish this view at much greater length.

SYMPOSIUM: BOSANQUET'S THEORY OF THE GENERAL WILL.

By PROFESSOR A. D. LINDSAY AND PROFESSOR J. LASKI.

I. By A. D. LINDSAY.

I SHOULD like to begin this paper with a brief statement of the standpoint from which I propose to treat its subject. There has been a great deal of criticism of Bosanquet's Theory of the General Will in the last twenty-five years. His *Philosophical Theory of the State* is perhaps the best or at least the most typical expression in English of the doctrines which Professor Hobhouse combats under the description of the Metaphysical Theory of the State. Professor MacIver, in criticizing the view that the State is a person has, I think, Dr. Bosanquet's doctrines chiefly in mind. Professor Laski, I know, is, like myself, both conscious of the greatness of the *Philosophical Theory of the State* and of the necessity of dealing faithfully with some at least of the doctrines there set forth.

With much of this body of criticism I am myself in great sympathy. When I began to lecture on political theory some seventeen years ago, dissatisfaction with the *Philosophical Theory of the State* and in particular with the theory of the real or general will influenced me more than anything else. As from time to

time I have read Dr. Bosanquet's book since, I have the same feelings of mingled admiration and exasperation.

I do not propose to go over in detail the ground which these criticisms have covered. I am rather concerned that we should not because of them neglect the profound and valuable teaching which Dr. Bosanquet's theory of the general will contains, and I propose to see whether this can be restated in a way which will make the criticism less valid.

Most of our dissatisfaction with Dr. Bosanquet arises, I fancy, because he makes his theory of the general will a doctrine of sovereignty. He sets it forth as the opposite of the Austinian theory. He speaks of "the diametrical and fundamental contrast between Austinian sovereignty, the sovereignty that is contemplated by legal experts and the sovereignty contemplated by such a theory as ours." That seems to imply that Austin and he are talking of the same thing, or at least trying to answer the same question when they discuss sovereignty. But while in Austin's treatment sovereignty is a perfectly definite conception, sovereignty with Bosanquet is a most elusive term. Consider the following quotations from Bosanquet: "Sovereignty is not a concession: it is a growth of inherent power." "Sovereignty is the exercise of the general will." "Sovereignty will find it hard to accept limitations. Hard? very likely! Sovereignty is there to do hard things." It is very difficult to read such phrases and much else that Bosanquet says about sovereignty without asking in bewilderment what he is talking about when he uses the term sovereignty: what question about the State he thinks is being answered when he or any one else defines sovereignty. He tells us that his theory of the State is substantially the same as the theory of Plato and Aristotle. But they did not state their theory in terms of sovereignty. Why should Bosanquet do so? It is not clear that he ever asked himself this question.

The explanation of this confusion (for that Bosanquet should think his theory the *opposite* of Austin's is nothing but a confusion) is historical and goes back to Rousseau. Rousseau found himself confronted with a doctrine of sovereignty as it was, for example, formulated in Hobbes, which was an attempt to answer the question—"Why should I obey the law?" it being assumed that some other answer must be given than the answer "Because the law is right." This doctrine of sovereignty bases the authority of the law on the authority of the person who willed or commanded it. "These principles," says Hobbes of the laws of nature, "men used to call by the name of laws—but improperly so, for law is the word of him that by right commandeth others." The theory made the fundamental fact about the State that the bulk of a given society obeyed a determinate person and it was first formulated when that *was* the fundamental fact about a State. The theory furnished at the same time a distinction between law properly so called and other rules which have not the peculiar authority of law, in that law is what the sovereign commands. It is therefore concerned with a juristic question—"what is the mark of these rules which the courts enforce and are called law?" and also with a social question—"whence does all this system of law get its authority?" The answer to the first question depended on the sovereign being a determinate person or body whose will was definitely ascertainable. For the lawyer the sovereign is first and foremost a source of determinateness. The theory's answer to the second question is to rest the authority of the system of law on the authority of the sovereign and that answer becomes unsatisfactory the moment that the authority of the sovereign cannot be taken for granted, and a further question—"But why should we obey the sovereign?" is seriously raised. The answer to that further question which is most typical of the circumstances under which the theory of sovereignty arose is the doctrine of the divine right of kings. Hobbes'

ingenious rationalization of obedience in his account of a society where men cannot agree as to what is right, but can agree as to whom to obey, really began the process of undermining the theory.

Rousseau tried to combine the characteristic assertion of the theory of sovereignty, that law is a command and derives its authority from the authority of the person who commands it, with a refusal to admit that there is in society any individual or body of individuals who ought to be obeyed by the other members of society. He therefore sought to find a will which could both be the source of law and have unquestioned authority. He found his answer to this problem in the general will. But his account of the general will, as everyone, including Bosanquet, has pointed out, is ambiguous. Bosanquet points out that although Rousseau distinguishes between the general will and the will of all, he continually speaks as though the two were identical. The same ambiguity shows itself in another form, the significance of which will be evident later, in the difficulty of making out whether when Rousseau says that the general will is always right, he means that we can first identify some will by its mark of generality and then conclude that it must be right, or whether we first conclude that a certain will is right and then conclude that it must be the general will. This confusion by Rousseau of what he has himself distinguished Bosanquet assumes to be but a mark of the old individualistic Adam which might without loss be eradicated, and he proceeds in his own account of the general will completely to eradicate it. But he failed to see that it was only by both confusing and distinguishing between the will of all and the general will that Rousseau could even seem to give an answer to both the questions which a theory of sovereignty is trying to answer—"What is the mark of law?" "Law is what is decreed by the sovereign body, i.e., the whole people voting." "Why should the citizen obey the law?"

Because in obeying the decision of the whole people the citizen is obeying the general will and therefore obeying himself—his true or moral will." So long as Rousseau holds on to the confusion of the will of all and the general will he still has a sovereign which wills something and whose will can be definitely ascertained. If the doctrine is purged of its confusion and the general will cleared of all connexion with the will of all, we get something which, even if it be called a will, does not will anything certainly not anything clearly and determinately ascertainable. To put the matter in another way we get an answer to the question. How can rules have authority over the individual?—namely, when they are the expression of the general will; but no answer to the question How are we to know what rules have this authority behind them?

The general will, as Bosanquet describes it, is certainly purged of all connexion with the will of all. I quote the description he gives in the essay entitled "*The Reality of the General Will*" published in "*Aspects of the Social Problem*."

"We may identify the general will of any community with the whole working system of dominant ideas which determines the places and functions of its members, and of the community as a whole among other communities. The system is never quite harmonious: readjustment is always going on, but the direction of this readjustment is determined by the forces in collision, together with the other forces of the machine. Both the more important workings of the machine and especially the direction of its readjustment are the most familiar expression of the general will. But the general will itself is the whole assemblage of individual minds, considered as a working system, with parts corresponding to one another, and producing as a result a certain life for all those parts themselves.

The general will cannot be identified with the decision of a community by vote upon any single issue. Every such decision

is an expression or consequence of the general will, but needs interpretation in order to say what direction of movement it really represents. In short the general will is a system in motion and cannot be expressed in a single proposition. And no system of voting can secure its expression, because it does not exist in a form that can be embodied in a vote."

"Again, the general will is not identical with public opinion considered as a set of judgments which form the currently expressed reflection upon the course of affairs. It may include those current notions or part of them, but it certainly includes much more, because the ideas that dominate the will do not always appear in reflection or at least not with the importance which they have in life. The general will is more a system of wills than a system of reflections, and appears in action quite as much as in discussion."

"Again, it is not merely the *de facto* tendency of all that is done by members of the community, though it is much more like this than like a vote or a set of opinions. It is, to a great extent, a *de facto* tendency, but only in so far as this tendency reveals active ideas with reference to the connexion of persons or groups of persons. Other tendencies than these do not directly concern the organization of life, and therefore do not directly form part of the active scheme of society."

Observe that in this passage Bosanquet has got so far from thinking of the general will as anything like the opinions generally agreed to in a plebiscite that his general will is largely unconscious. No one, he says elsewhere, is capable of knowing or expressing it all. "A *de facto* tendency" is nearer to it than any set of opinions or reflections. It can be called, apparently, a machine, or an organization of life. All expressions of it are imperfect. "Thus the general will," says Bosanquet in a later passage, "is only in part self-conscious, and in so far as an attempt is made to formulate it in judgments, it seems to become fallible."

For then it ceases to be fact and becomes interpretation of fact." How has he managed to develop all this out of Rousseau and what sort of a thing is this semi-conscious will?

Bosanquet has himself given what is a long answer to these two questions in the chapter in the *Philosophical Theory of the State* entitled the *Psychological Illustration*. It may be summarized, I suppose, if we say that for him the most important element in Rousseau is contained in the statement that society is a "moi commune"—a real person; and that he has in that chapter, with the help of Plato and of psychology, developed all that is implied in the notion that society is a person and has a will. But round that conception of corporate personality controversies have raged which I wish to avoid. I find the chapter singularly unconvincing so far as it is meant to confirm the doctrine of corporate personality. For me the differences between a society and a person about which Bosanquet says nothing are as obvious and important as the identities of which he says so much. I think that Professor Laski is in agreement with me on this point and I need not do more than state my opinion dogmatically. We could either of us say a good deal against the doctrine of corporate personality as developed in that chapter, if we were challenged.

I prefer to go back to Rousseau and ask what there is in his conception of the general will as contrasted with the will of all which is not done justice to in other social theories.

Rousseau uses the adjective "general" in the phrase "general will" in two senses, though he does not, I think, himself distinguish them. He means by it sometimes the will *for* what is general in contrast to the will *for* what is particular. When he is talking in this sense, he is insisting on the contrast *within* the individual between his moral will and his selfish will and asserting that inasmuch as the claim to freedom is a moral claim, the individual cannot at one and the same time claim to be free and

deny the obligation of such rules as are necessary to give the same freedom to other people. The claim to freedom is the claim of a moral will and a moral will must will what is general, though it need not be generally willed. What is general is the object of the will. Generality is a standard which should guide the wills of individuals and legislators. This meaning of "general" is assumed in much of Rousseau's argumentation in the *Social Contract*. The doctrine is both true and important. It is clearly akin to Kant's formulation of the categorical imperative. But it in no way carries with it the implication that society is a person and has a will.

But Rousseau also uses the adjective "general" in a subjective sense, the will of something—the new moral person, that is the state. In this doctrine—for all its difficulties when pushed to extremes—Rousseau seems to me to be expressing two things, distinct though connected, which he found in a real society. Bosanquet has, I think, taken hold of the first and neglected the second. The first point is that in a true society men's purposes develop out of the society instead of society being merely instrumental to purposes men had as individuals. We may elucidate this point by distinguishing three kinds of association. In the first kind—to which the conception of contract is adapted—the association is only an instrument by means of which men get more efficiently what as individuals they had severally wanted. Hobbes' account of the social contract is an attempt to describe the State in terms of such an association, and economic associations are the typical example of this class. There is a second kind of association which is an instrument by which men achieve what before the association was formed they had in common purposed. To such a form of association the conception of trust is adopted. Locke's account of the social contract and most theories of natural right are attempts to describe the state in such terms. The numerous societies founded to further

this or that public cause are obvious examples of such associations. But, as the Scotch Free Church case showed, there are certain societies, to the facts of whose nature justice is not done, if they are not regarded as having an inherent life and power of development, whose proper purposes spring out of their common life. The common life of the society is the only sufficient standard for their actions, because these societies are not mere instruments of purposes, but themselves develop and maintain the purposes of their members. It is societies of this kind which make us want to talk of corporate personalities, just because the rights and duties to which they give rise cannot be made to inhere in individuals or be adequately interpreted in terms of contract or trust but only in terms of the society regarded as a common life. If we are not going with Rousseau and Bosanquet to say that they are persons and have a general will, we must at least talk of their common life, and we must make that, whether it be called general will or common life, the standard by which we judge the rightness of actions done and laws passed in the name of the society.

What Bosanquet seems to me to have done in his account of the general will is to have taken this hint of Rousseau's and developed it into a masterly account of the elaborate system of institutions and mutual relations which go to make up the life of society, to insist on its complexity and vitality and richness — its transcendence on what any one individual can conceive or express, and then to say—That in all its elaborateness and multifariousness *is* the State: it is no less than that; and that is the standard of legislation and what we ordinarily call State action. The business of politics is to take this elaborate complex of institutions for granted, and to seek to remove disharmonies which are thwarting its life and checking its vitality. The State in this narrower political sense, is the hinderer of hindrances. The aim of its compulsion and that criterion of the success of

that compulsion is the setting free of the spontaneity which is inherent in the life of society. National rights or a code of the law of nature are far too stereotyped to do justice to the moral life of society.

This seems to me a very important and a profoundly true political doctrine. But I am sure that it is misleading to call the life of society so conceived a general will. It is a standard by which political willing ought to be guided. What members of such a society are after when they meet for discussion or deliberation is to do what the living purposes or purposeful life of the society demands. We may describe the aim of all moral action as the doing of what the relevant moral situation demands, and Bosanquet is describing in the theory of the general will the relevant moral situation for political action—it is the whole moral life of the society on behalf of which political action is to be taken. And it is misleading also, as I said at the beginning, to regard this as a theory of sovereignty. For the theory of sovereignty the ultimate standard is someone's will. Bosanquet, as Rousseau before him, is really returning to the older view of the state which based the state on morality and made the political sovereign subservient to morality. But his morality is something expressing itself in a life and not in a code of rules or system of principles. Political machinery, general elections, legislatures, judiciaries and executives are endeavouring, or ought to be endeavouring, to express this or be true to the spirit of this common social life. Their task is not really one of commanding. They are there as organs or instruments of this common life. That is not something which expresses itself automatically. It has to be studied and elucidated; for the understanding of it knowledge and discussion are much and mere voting very little.

This theory, if it is to be a theory of the State, needs to be supplemented by something corresponding to the Austinian theory of sovereignty, or by some answer to the first of Austin's

question, What is the distinctive mark of positive law ? For the defect of Bosanquet's theory as it stands is that it gives no adequate account of the juristic side of the State, does not explain how the complex social life produces a system of government and law. I have suggested in a paper I read before the Aristotelian Society in 1924, that the proper modern equivalent of Austin's sovereign, who is a determinate person or persons, is a sovereign constitution—in that the fundamental fact about a modern State which makes law possible is the agreement of the bulk of the society to accept a certain constitution. The members of a modern society obey determinate persons and determinate rules because the persons are where they are and the rules are what they are through the working of the constitution. The constitution will of course fulfil its function properly only in so far as it has regard to and successfully interprets the common life of the society—Bosanquet's general will ; but the common life of the society can only get the unity and the regimentation it requires through the common acceptance of a political constitution. There is nothing fundamentally inconsistent with this in the substance of what Bosanquet says, but he has too little interest in juristic questions to go into such matters.

There is, however, one further aspect of Bosanquet's account of the general will about which something should be said. It is connected with his neglect of a further element in Rousseau's account of the general will which I have yet to describe. Rousseau's theory is a theory of democracy. Democracy is implied in his general will as much as it is in the will of all, although Rousseau's confusion of the two inclines him to the advocacy of mistaken democratic machinery. Bosanquet clearly did not think that if the theory were purged of any connexion with the will of all, it would lose all connexion with democracy. For he himself begins his account of the problem of political obligation by announcing the democratic principle which he gets from Rousseau

that the only true ground of political obligations is self-determination. There must be for him a sense in which when a man obeys the general will, he is, as Rousseau puts it, "obeying himself alone." And it is evident that Bosanquet accepts this democratic assumption by his insistence that the general will is the real will of the individual. For that—strange as the statement may seem—is what he is maintaining when he talks of the *real* or general will. In obeying it the individual is obeying his "real" self.

But when we find that this real or general will is only partly self-conscious, that it exists in the whole complex interplay by institutions and forces—whatever these may be—any real connexion between democracy and Bosanquet's general will seems very remote. His account of the general will will apparently fit any society. Of course he would be the first to insist that no actual society is more than an approximation to its philosophical idea, but there is little or nothing in what he says to show that a democracy is a nearer approximation to this philosophical idea than any other form of government. When we remember that Bosanquet in a paper read before this society once described Plato as a democrat, we must realise that he was capable of using the word democracy in a very Pickwickian sense. I think many persons feel, in reading Bosanquet's account of the real will, that his theory only adds insult to injury by informing the democratic reformer that if he will only look at existing society with a sufficiently philosophical eye he will see that he has what he wants already.

Let us turn then to the further element in Rousseau's general will which I have accused Bosanquet of neglecting. Its elucidation may throw some light on the connexion between the general will and democracy. Rousseau, as is well known, was primarily thinking of a small society. Now it has often been recognized that in a society small enough for

common discussion there does emerge something which can only be described as what the society has willed. For it may come about, and with adequate and informed discussion, in an atmosphere of what Bosanquet calls *bona fides*, it always does partially come about that the decision of the society is the result of all its members contributing to the discussion and of nothing short of that, so that each may recognize it as the will of the society or, as we say, "the sense of the meeting." It has come about by the individuals willing and thinking together. But individuals willing and thinking together are the society, and therefore if there is a decision which cannot be described as A or B getting their will but as the real outcome of discussion and deliberation, that is the society's will. (This is to admit the doctrine that society may have a will. It does not follow that it is therefore a person.) This is not the same doctrine as we have described above. For it is one thing to say that there are common purposes involved in the common life of society and that is the standard which ought to guide political willing, and quite another thing to say that there are certain decisions which have only been come to as the result of the members of society willing together. In the first case, the common life is the standard of what may be the willing and deliberation of one or a few. In the second case all those who live that common life seek by common reflection and deliberation in that common life to come to a decision about its direction or control. It is characteristic of Bosanquet's attitude towards will and freedom that he has very little use for this distinction, and that he does not seem to think it matters much how far his general will is conscious or not.

No doubt there is a vast difference between the vivid realization of common purposes and the reality of common discussion which can take place in a tiny society and anything that can happen in a modern State. But we are becoming increasingly to recognize that democracy can be made a reality on a large

scale in so far as each member of society not only has a specific function in society but can become conscious of the relation of that function to society as a whole, and can somehow make his contribution to the general deliberations of society. The test of democratic machinery in this view is the extent to which it makes discussion a reality and enables each member of society to make his contribution tell. But no democratic machinery can do much in this direction without an educated and public-spirited community. But in so far as something like that does happen, the decisions of Government are not the result of a few superior persons trying to express and interpret the purposes of the common life of the community, but rather the result of that common life becoming, as it were, self-conscious, and it is then not so much a misnomer to say of such decisions unlike anything described by Bosanquet, that they are expressions of a general will.

II. *By* H. J. LASKI.

I shall try to follow the Master of Balliol's example, and refrain, so far as I can, from the more formal criticism of Bosanquet's doctrine. I do that the more willingly as the task has, in recent years, been amply performed, more especially by Prof. Hobhouse in a now classical volume.* But like the Master, I should like to pay my tribute, if I may, to the immense importance of Bosanquet's book. Nobody who reads it can doubt for a moment that it is the work of a noble-minded man.

I would rather attempt, if I can, to indicate what seems to have led Bosanquet to the view he adopted. Then I shall indicate some of the difficulties to which this view gives rise. Finally, I should like to comment on the substitute proposed by the Master of Balliol.

Bosanquet seems to me to have started by being greatly impressed by the impact of society on man. He saw that the room for the expression of individuality is very small. We are imprisoned in our traditions. It is from them that we take our colour, our wants, our hopes. We move with one another, we are dependent one upon another. The meaning of society is in its relations. Each of us is, therefore, to be read in the context of those relations. And, for Bosanquet, the relations were an indivisible nexus binding men into a social unity. They were, therefore, a whole. He found their meaning in that whole. It was, for him, real, and organic. Each of us appeared, the more he contemplated it, to be more real the more it was real.

* *The Metaphysical Theory of the State* (1918).

Its ends were ours, its purpose our purpose. Were we subtracted from it, all that was left would be void of what, for him, was the essence of our personality.

The individual then, in Bosanquet's view, is real only in his relations; or, if I may put it in another way, is, for him, real only in what links him with other men and not in what separates him from them. The relations constitute a unity which is alive and has personality. But it would be, he thought, an incoherent unity if it merely remained what Prof. Barker has called "a vast complex of social co-operation."* It needs to be drawn together, to be co-ordinated. The task of co-ordination is the function of the state. The latter registers accepted coherence, it "endorses" I use again Prof. Barker's word--approved co-ordination. This work is *a priori* good, because it is making unity more tight, more cohesive, more real. And since we find our meaning more fully as unity becomes more complete, it follows that we find our meaning more fully in the state than elsewhere, because its function of unifying makes it the largest embodiment we can know of what is most real in ourselves. Since what is most real in ourselves is most truly ourselves, the more we obey the state the more we realise the purpose of our existence.

One or two implications of this doctrine need emphasis. Bosanquet admitted—as every Hegelian is, of course, driven to admit—that the task of the state is never perfectly performed; but it is for him larger and deeper than that of any possible rival. Indeed, more than this may be said, for the very nature of the state as co-ordinator makes society and each aspect of society find its meaning in the state. And there is no ordered purpose in society until its activities are thus co-ordinated. Its point, its driving power, come from its state-context. Its

* *Political Thought from Herbert Spencer to To-day*, p. 71.

will is within the will of the state. The latter is general, all-embracing, total. The full purpose of life is there, and there alone. Everything else is partial, fragmentary, incomplete. Trade unions, churches, voluntary societies of every kind, have their purposes; but these are incomplete and limited because they do not enter into the social whole until the state adopts them, at some angle, for its own. Then they, too, become suffused with the larger purpose, find their will transformed into generality. But this generality is not within them, or of themselves. It comes to them from without. It is the contribution to them made by the all-enfolding purpose of the state. For in that only, because it alone is all-embracing, is the ultimate philosophy of the common consciousness which makes them one. In that, be it noted, they are a single, universal mind; and, because of that, Bosanquet is able to adopt Hegel's view of the state as "self-conscious ethical substance."

The Master of Balliol, as I understand him, rejects this view on a number of grounds. He criticizes, first of all, the elusive character of the general will as we encounter it in Bosanquet. For Bosanquet, the general will was a theory of sovereignty, but when we try to discover what the latter means by sovereignty, we are driven back into mysticism. Here, I agree with him, that the root of confusion is historical. The tradition which found its summation in the idealists was an effort to explain obedience. It ended legally in the theory of Austin that the sovereign was the superior whose will is habitually obeyed. What Bosanquet really did was to argue that this sovereign *ought* to be obeyed because its will alone was really general. And what he meant by generality I have set out above.

But for political philosophy the will we ought to obey is one that must be clearly recognizable. That of Bosanquet, as the Master rightly insists, is intangible to a degree that makes identification impossible. It is not the will of all. It is not

the decision of the community upon some specific issue. It is not public opinion. It is not a "*de facto* tendency." It is the will of the state. But what is the will of the state? The answer seems to be that, the will of the state is the general will.

Here, as the Master argues, the essence of Bosanquet's position turns upon his conception of the state as a person. Indeed, I think we ought to go further and say that it is in his conception of the state as a person in which alone we ourselves can be at our best. In other words, Bosanquet's essential point seems to be capable of statement in a syllogism of this kind:—

We ought to obey that which expresses the best of ourselves.

That which expresses the best of ourselves is the state.

Therefore, we ought to obey the state;

and the best of ourselves is identical in each of us and becomes unified at the moment when it is embodied into the will of the state. But because the state is in such a way, and with so high a character, a unified will, it is Rousseau's "*moi commun*," a corporate person. All this, the Master, I believe rightly, rejects with some sharpness.

I should like, if I may, to state my own way of rejecting this approach to the analysis of the problem. I do not deny that the state is the great co-ordinating organ of society. I do not either deny that some such co-ordinating organ there must be, if anarchy is not to reign. There are conflicting purposes in society: the burglar and the policeman, the Roman Catholic and the secularist, Sir Alfred Mond and Mr. Cook. For the purpose of social peace, the terms of the life these opposites must live have to be laid down. All of this, I take it, is common ground between idealism and its critics. But, at this point, the paths seem to me to diverge radically.

For when you analyse the state as co-ordinator in action, it appears as a government issuing orders. That is its normal

character, and a theory of its actions must be set out in terms of normality. It is the failure to perceive this elementary fact which made Bosanquet commit the two mistakes to which the Master of Balliol has drawn attention. (1) He confused society with the state. (2) He wrongly thought that his theory of sovereignty was distinct from that of Austin, whereas what he was doing was to state the juristic theory in far stronger terms by making legal claims ethical in substance. For actions of government which go into operation are actions of the state. If the will of the state is the general will, then actions of government which go into operation are actions of the general will.

I do not profess to know how Bosanquet would have avoided that conclusion; and I should like to draw attention to some of the results which follow from its formulation. Every government consists of men who, like ourselves, are human and therefore fallible. They act for certain ends that they deem to be good. They may be mistaken in thinking those ends good. They may be mistaken in the means they take for their achievement. There is, in brief, no necessary goodness in what they do. That depends upon what results from what they do. Partly, this is a matter of objective consequences; partly it is a matter of the subjective reaction each of us has to the action of government which, in its turn, is a part of the objective consequence. What is certain is the fact that often the decision of government to act in a particular way leads to a conflict between it and some other social group. I am unable to see how (1) there can be any *a priori* judgment between them, or (2) there can be any sense in saying that the will of the government is right because it is general. Nor do I think that the intention of government—though the character of its intention is an important criterion of how I ought to act to it—is an index to its rightness. For in political philosophy it is not only necessary to will what is

right, it is also necessary to know what it is right to will. And this we can only know by knowledge of the consequences of willing.

I am led by an analysis such as this to two important conclusions. There is not, first of all, any common will in society. There are innumerable wills sometimes in co-operation, sometimes in conflict. They struggle with one another for, and help one another to, survival. If it is said that the will among them which ought to prevail is the best, I agree; but no *a priori* scrutiny tells me which is the best. That is known only by judgment of results. Second, there is no common good in society in any sense other than verbal where there are ultimately conflicting desires in that society. We make a common good as we remove conflicting desires. The common good is not there to be unfolded; it is not the release of some pre-existent harmony. The common good is not necessarily made by the state. That depends upon whether the policy of the state increases or decreases the realm of conflicting desires: and this is known only by actual scrutiny of the event.

Here, perhaps, it is germane to point out a further difficulty I feel in Bosanquet's view. His insistence on the importance of relations is, of course, quite true: and it is certainly illustrated in a magnificent way. But to say that I am, however largely, influenced by my relations is not to say that I am my relations. Bosanquet was profoundly right in insisting that political philosophy must consider man in society and not set him over against it. But that is not to say that man is a function of society, absorbed in it, and subserving its end. He is one in it, but not one with it. He is always using it, as best he can, to serve his ends, to satisfy his desires; he judges it, so far as he thinks of it, as satisfactory in the degree that it enables him to attain a satisfactory harmony of desire. But this is to affirm that his will is never completely at one with it in any continuous

or coherent way ; and it is conceivable that a man may, like Nevil Beauchamp in Meredith's novel, find the greatest harmony open to him, by open conflict with the will of the state as he meets that will.

This is to draw attention, as the Master has done, to the two senses of the idea of generality in Rousseau. There is a use of "general" which means "altruistic." A will is, for Rousseau, "particular" when it is directed to some purely private and selfish end ; or, as I should prefer to put it, when I satisfy some desire of my own at the cost of others. A will is "general" when what it does by willing is to add to, and not subtract from, the totality of fulfilled desires. A "general" will is thus a will for others (in whom I may be included) ; a "particular" will is a will for myself in which I do not include consideration for others. There is clearly a real importance in the distinction. But there is no logical necessity, so far as I can see, for saying that a "general" will, in this sense, is marked by any of the features which Rousseau attributed to it, or that it is supremely to be found in the state. The claims of such a general will are only partly in its character as general ; they lie, at least equally, in the substance of the thing willed. And it is in the substance of, not in the intent which clothes, this will, that its power is to be discovered. From this I infer that the claim of the state to be obeyed, even when, in this sense, it is willing generally, depends upon the object of its will. If I am a Protestant, and the state, with the highest possible motives, wills my conversion to Catholicism, I shall resist its will. And I do not see that I can be regarded as doing wrong in reaching that decision. The Master points out that this aspect of Rousseau has kinship with Kant's categorical imperative. I agree. But I would point out, at the same time, that the universality of the categorical imperative is not contained in my intention that my act should become a universal law, but in the actual consequences of my act. It is

from consequences and not from intentions that men build their imperatives.

The second sense in which Rousseau formulates his thesis of generality raises problems much more complex and far-reaching. Like Bosanquet, he makes the state all-pervasive and all-inclusive; he then says that the state is a person, and attributes "generality" to it because it is all-pervasive and all-inclusive. I omit for the moment the question of personality. The point I want to make is that the result is reached by a confusion between "ought" and "is," between the ideal and the facts. Rousseau must be read in the special context of what he was trying to do. He had pointed out, in the *Discourse on the Origins of Inequality*, that man in the natural state was free; in the civil state, because inequality supervened, freedom was lost. Freedom, therefore, for Rousseau was a function of equality. I can only be free in the civil state, if my desires, equally with those of others, find adequate media of fulfilment. If the balance is tilted in one direction, as the institution of private property tilts it, freedom is lost because the incidence of institutions prevents regard being equally paid to the pressure of desires. Only those with property in fact have what the economists call "effective demand."

All this seems to me broadly true; but Rousseau's answer to his problem is, I think, deceptive. Men surrender all their rights to the state which then acts for them as a whole because it is they as a whole. This seems to me to ignore the whole process of government. Rousseau's own distinction between government and the state is built upon the recognition that acts of the former do not possess the "generality" which belongs to acts of the latter; that was why, for him, a representative system was worthless, and the English people free only at election time. But the fact surely is that we only meet acts of government in our normal life as citizens; and the result is that

"generality" is not inherent in its acts, but is the outcome of a judgment made upon those acts by ourselves. The substantial element in our judgment is, of course, our view of whether the particular act, adds to, or subtracts from, the satisfaction of desires which we feel to be important. Rousseau felt that if the state really acted as it should, then its acts would always be acts of the "general will" in his first sense of the term. But he added that it would only so act if all citizens participated in making its will, and if all of them willed "generally" when they so acted. That is, I think, saying, that the will of the state is general when the conditions of generality are fulfilled. It does not tell us when they are fulfilled; and since the prelude to the possibility even of a general will, in Rousseau's sense, cannot be fulfilled in the modern state, each of us is left, as best he may, to form his own judgment upon the policy of the state as this reveals itself in its consequences actual, or potential.

If this is true, it is fatal to the idea of the state as a person, and there is no reason to regard its actions as marked by that "all-inclusiveness" upon which Rousseau insisted. From the angle of Bosanquet's doctrine, this seems to me to involve the view that while we may agree that the state is necessary as co-ordinator, we know nothing from the fact that it is needed to co-ordinate about the quality of its will. We can say that the life of society is at all focal points involved in the actions of the state. But we cannot say that this results in good or evil until we know what are the consequences of the connexion. *A priori*, therefore, the will of the state simply *is*; what it becomes depends upon what it does and how. Of this, we are the judges, and the activities of the state are therefore, from an ethical standpoint, dependent upon factors outside itself.

Nothing in this, so far as I can see, in the least detracts from any insistence we may make on the reciprocal action on one another of the various parts of society. I agree with the Master in

his eulogy of Bosanquet's account of their richness and complexity. But I do not see how we are entitled to take the further step and regard this elaborate structure as the expression of one great purpose which is converted by the state into one great mind of which, so to say, it is the vertebral column. To me, not less than to Bosanquet, the elaborate multiplicity of voluntary associations is of fundamental importance. Nor do I deny that every individual is different by reason of his contact with them. With all that the Master underlines of the significance of their common life, the need, also, to treat that common life as a thing apart from the individual lives of which it is constituted, I am in full sympathy. But if richness, variety, spontaneity, common lives are real, our society is not a One, but a Many. It is not reduced to a One because, in the midst of its abundant plurality, the state seeks to co-ordinate. We have always to ask *what* the state is co-ordinating for, and for whom it is co-ordinating. These may be partly questions of intention; but they are also questions of result upon which the judgment of each of us is relevant.

This means, I think, as the Master argues, that nothing in Bosanquet's superb picture of social complexity leads to a theory of the state as sovereign. I can see no meaning in any attempt to depict its conflicts and antagonisms as the expression of a will that is ultimately, even if subconsciously, one and indivisible. I can see no meaning, either, in the argument that because the antagonisms are co-ordinated, or held at bay, by the state, that this gives it a claim to sovereignty. The thesis that the antagonisms are held at bay at all, seems to me a judgment upon which there is room for wide differences of opinion. A Communist would say that the state promotes co-ordination by repressing all antagonisms which injure the owners of property; and I confess that I should not find it difficult to sympathize with this view. The claim to sovereignty, therefore, law apart, is valid

only as it is proved that there is a growing power to satisfy desires in a society where men are treated as equal in their right to attain their desires. If there is inequality in this treatment, and the state maintains this inequality, the claim may, for those to whom equality is denied, seem a mockery they must, above everything, expose.

The Master of Balliol is, of course, entirely right in saying that the business of the state is to set free "the spontaneity which is inherent in the life of society." But, I think, he is not less right in urging that what this task implies cannot be called a general will. It is a view of the state's duty, a criterion of its conduct, an "ought" to be realized, not a fact in operation. That "ought" deserves sovereignty, doubtless, because with its transference to the event, the best of what there is in life is released for action. But this is only to say that sovereignty ought to belong to the highest social purpose, the ideal right, or justice, or what you will. The problem of politics is to measure where it is in terms of where it ought to be. Bosanquet simply insists that it always is where it ought to be, because where it is—in the state—there ought to be the effort to realize the highest social purpose. Yet no one can look at the actual history of states and retain the belief that this coincidence is normal. He cannot make a pure instance of what ought to be a canon of actual behaviour, if that which embodies "oughtness" never is what the pure instance demands.

Anyone, indeed, who considers the facts will understand Rousseau's insistence that his Utopia was only capable of being realized in a city-state like Geneva. The scale of our life, that is to say, is fundamental to our problem. And the very vastness of that scale impinges, I think fatally, upon Bosanquet's doctrine at two points. One of these is internal. Within a state generality, in Rousseau's first sense, is only attainable where the desires of men are weighed as equally significant. Class or creed, race or

colour, cannot count there. If they do, generality is, *a priori*, absent; and conflict is at the root of the society. But in the states we know, they in fact count in a fundamental way, and the differently weighed interests are protected and maintained by the state. I do not see, for instance, why a negro in the Southern States of America need identify the state there with any one of the claims made for it by Bosanquet.

The second point is external. Despite the concessions and corrections made by Bosanquet in his last years, his theory of a sovereign state seems to me incompatible with an international society. Yet, to-day, if we are to live well, it is in the primacy of that international society that our salvation is to be found. This means, if it means anything, recognizing that the power of ultimate decision lies beyond the individual state. It means that the latter's will must bow before one larger in intent and vaster in needs served. Even on Bosanquet's method, it might be claimed that world-organization stands to individual states as these to the groups within their power. World-organization co-ordinates the activities of individual states for an interest wider than any other we know. No state, if this task of ultimate co-ordination is to be effective, can have a sovereign authority against it. And, unless Bosanquet is willing to admit this, his doctrine is really impotent in the face of the largest problem of our time.

It is, I think worth noting that the curious inability of Bosanquet to realize the significance of the state as an historical phenomenon is really the outcome of the fact that his doctrine is essentially a static one. For him, good is always being realized. The subserving of our real will with the will of the state is taken to mean that the best that can happen to us is in fact happening at each moment. This it is which seems to me so fatal to any doctrine which, by making the state exist in its own right, gives to it a life of its own independently of the constituent lives of its

members. Not only is this, I submit, a direct contradiction of all psychological experience, but it is also fatal to the idea that our values as persons are real. If I realize myself always as an end outside myself is realized, I do not possess personality in any sense to which I can attach meaning; yet, surely, the most real experience I know is the realization of myself as an end. And if the state can neglect my values to prefer its own, then my values, and therefore my personality, cease to count so far as the state is concerned. Yet in actual life, again, my whole attitude to the state is dependent upon the degree to which my values are taken account of in the decisions that are made.

A state, in other words, is a collection of men and women, and its unity is simply not comparable to the unity of any one of them. To say that they are different by reason of their state-relation only means that they are different because of the consequences which flow from the exercise of a certain power in society. For them that power is significant not as an end, but as a trust exerted on their behalf. They expect to find that the consequences are desirable and they are the judges of this question. The state does not judge them; for the state is, in this context, merely the body of persons to whom this power has been entrusted. Here, at least, we abandon the dangers of metaphor and analogy. We do not say that a number of minds is one mind, any more than a wood is a tree or a hive a bee. We say that the will of the state is the will of certain persons exercising certain powers, and that these persons are affected by the desires of those they must seek to satisfy. We do not say that this will is in any way "general" until we know what it does. We give it its value after we meet it; its value is not, and cannot be, inherent. For its value is dependent upon the fact of what it actually does to the desires it exists to satisfy in the event itself.

In this context, I would like to explain what relation such a view has to the outstanding theories of a general will.

Rousseau's theory appears as a system of conditions which, if in operation, would make possible the realization of the good life for the members of the state. They are the Utopia he built from contemplation of the life about him, and, like all Utopias, they are a criterion by which actual states can be judged. Bosanquet's theory is in a different position. For, first, it is built upon assumptions which Rousseau never made. It is dependent for its validity upon making entire abstraction of the whole governmental process as we know it. It makes the ideal actual and the actual ideal. It lacks at every point institutional precision. It does not tell us where sovereignty is ; it does not tell us how we can recognize the general will. It assumes that all is somehow part of a general will that is unfolded in the movement of life. All this is derived from the two hypotheses, (1) that all minds at their best make one mind, and (2) that this one mind is in the state. But the first hypothesis is, I suggest, simply a metaphorical way of stating that what is discussed by all is different because it is affected by the discussion ; and the second hypothesis does not tell us how we are to know that one mind when we meet the demands of social organization. Rousseau's theory does not demand the corporate personality he evoked to make it both attractive and intelligible ; Bosanquet's does. But his corporate person is an inference illogically made from belief that the unity of men's wills is in the fact of willing, instead of being, where it exists, in what is actually willed. But since what is actually willed is not necessarily unified, there is no necessary unity in society. It is desirable, of course, that there should be more ; but we cannot predicate of any organization that it will secure more merely from the fact that it is, as is the case with Bosanquet's state, its business to secure it. Moreover, even the desirability of unity is contingent ; for, obviously, this must turn on what the unity makes.

Perhaps I may add a few words on the sense in which the Master of Balliol is prepared to say of certain decisions of

government that it is not a "misnomer" to call them "expressions of a general will." He rightly points out that the supreme defect in Bosanquet's doctrine is its failure to make any coherent transition from the general process of social life to the fact of government. It never considers the juristic aspect of the state; nor does it concern itself with the process of administration. But any theory of the state that is to be adequate must obviously explain both the nature of law in the state and the grounds upon which law can rightly claim to be obeyed. Had Bosanquet, as I have pointed out, considered these things, the logical result of his doctrine would have been an Austinian theory of sovereignty made the stronger by the fact that this sovereign was also the supreme incarnation of moral right.

This clearly will not do; and the Master therefore suggests that sovereignty in the modern state belongs to the Constitution. This he regards as binding where and when (a) it is an adequate expression of the common life of the society, and (b) is operated so as to act as a successful interpreter of the common life. The persons who operate the constitution are then entitled to obedience when they fulfil the two conditions I have noted. The Master insists that all must share in the common life in order that the criterion of its interpretation may be complete; and he points out that in a democracy there can be no common life, save where each member of the state has a specific function that he can perform so as, in its exercise, to "become conscious of its relation to society as a whole, and can somehow make his contribution to the general deliberations of society." Each contribution, he urges, must really count in the making of decisions, and this involves an educated and public-spirited community. Where these conditions exist, the will of the state may fairly be described as a general will.

I have myself elsewhere* suggested a theory of interpretation

* Cf. *A Grammar of Politics*, chap. vii, *passim*.

which has obvious affinities with this view. Perhaps I may, therefore, underline what I take to be certain necessary implications of the Master's argument. As he states it, the substance of it amounts to saying that when a good constitution, *i.e.*, a constitution that is built upon the wants of men, operates so as to continue to satisfy their wants, it is entitled to obedience. This raises the questions (*a*) what is meant by a good constitution? (*b*) who decides whether it is good? and (*c*) who decides whether it is good in operation? In my judgment, the only possible answer to these questions is that the test lies in the judgment of individual citizens. We make the law valid by consenting to it. We consent to it as it satisfies our desires. A good law is, therefore, a law which has as its result the maximum possible satisfaction of desire. And this in its turn involves an empirico-historical theory of politics. It means that a constitution is not likely to be good unless men equally co-operate in making it and working it for the simple reason that, historically, classes who are excluded from a share in power are always excluded from a share in benefit. Because, therefore, each citizen is an end in himself, each citizen must know that his desires are so counted that he can fulfil himself. He is therefore, entitled to the conditions which assure him that his desires will be counted; and these conditions are inherent in the fabric of any state which presents itself as worthy of obedience. Where, alternatively, these conditions are absent, those for whom they are absent are entitled to deny that the state is in any sense the guardian of their interests.

If this is accepted, it would give us the criterion of a good state, and the means of judging existing states. It is not uninteresting to note its resemblance to the problem Rousseau set himself before he unfortunately adopted the view of the state as a person. Broadly, the argument is that a decision which incorporates the common needs of all citizens without

distinction may claim to be the expression of a general will. History compels us to add that for this purpose all citizens must be in a position fully to make their wants known, and that there must not be undue disproportion in their ability to win response from those who, at any given moment, exercise power. On this theory, it must be added, a state is only known by its performance, and the test of its performance is the judgment of all who are affected by its results. It is a theory, therefore, which lacks altogether the assumption of necessary unity, which lies at the heart of the idealist philosophy of the state ; indeed, it does not even profess assurance that unity can be made. Its sole profession is the belief that in a society of equals, where care is taken to safeguard the purposes of equality, the diversities we encounter may attain effective co-ordination in a state built for that purpose. I believe this to be true ; and perhaps I may add that the road to its attainment lies through our ability to learn the lesson Pericles taught when he said that the secret of liberty is in courage.

SYMPOSIUM: IS THERE A MORAL END?

Professor J. L. STOCKS, Professor W. G. DE BURGH, Mr. W. D. ROSS.

1. *By* J. L. STOCKS.

I SUPPOSE we shall be agreed that positive moral significance belongs to any action in which a man does what he thinks right because he thinks it right. To act thus is to adopt the distinctively moral attitude, just as to create what is beautiful because it is beautiful is to adopt the distinctively æsthetic attitude. The question proposed for this discussion is a question as to the further interpretation of this attitude. In particular: has the man who so acts some end, aim, or purpose in view, and does he accept the act which he adopts and reject its alternatives as consistent and inconsistent respectively with this end? Does the judgment that this act which I now propose to do is the right thing to do allow of such analysis that the act may be seen as a means to an end? Is there a moral good which is furthered in every action which has a positive moral value? To this question I wish to propose a negative answer. If we may term the practical attitude in question the moral attitude and its motive the moral motive, my thesis is that the moral attitude and motive are not purposive.

Man first shows his reasonableness in action by making action purposive, and in purpose means and end necessarily fall apart. For mere impulse there is neither means nor end : there is only a blind fumbling after action of a certain pattern and tendency, as the occasion offers scope for it. By purpose we see the occasion as opportunity, we value it for what we can make of it, and we take care to act so that the results of our action, near and remote, are likely to be such as we shall welcome when they come. The mere impulse to eat will lead us to eat what is bad for us— or if it does not, the credit is Nature's, not ours ; but, harnessed to purpose, eating is stimulated and restrained in view of some end, to keep strong and well, to enjoy oneself, to live within one's income. Within the limits set by the end or ends conceived the purposed action is guaranteed, so far as there is no error in the calculation, as good : the action is reasonable and can explain itself.

But on these lines action never becomes wholly reasonable. It is never able fully to explain itself. Both end and means are seen on analysis to contain surds or unexplained remainders. That certain kinds of thing or activity interest and amuse us, certain others do not, is a fact not easily altered and indeed not fundamentally alterable ; and on such facts all practical purposes depend for their end. These interests are what Butler called " particular affections " : they mark out certain things as good, and the goodness of the things thus marked out is presupposed in the purposive attitude. " Self-love," says Butler, " does not constitute *this* or *that* to be our interest or good : but, our interest or good being constituted by Nature and supposed, self-love only puts us upon obtaining and securing it." Butler speaks of self-love ; but it does not matter, so far as I can see, in what terms the purposive attitude is conceived, whether as directed to self-interest, one's own happiness, or to the greatest happiness of the greatest number, or even as self-realization : in each case this

limitation stands, that the end is "constituted by Nature and supposed" in the purposive activity. So much of the end.

That the means can never rid itself of a certain accidental and contingent character, and remains in external relation to the end which it helps to realize, this is, I suppose, generally conceded; but it is not always grasped how deep-seated this contingency is, and the proper consequences are not always drawn. The difficulty is concealed and slurred over by loose and misleading applications of the terminology of purpose where it does not apply. End and means are allowed to "coincide," or the moral non-purposive attitude to persons is described as an attitude which treats them as ends-in-themselves. Such attempts to save the face of purpose should at least be postponed until we have seen that face and considered whether it is worth saving.

The discovery of means to a given end is essentially the discovery of a causal nexus. Means are called means so far as they are productive of something else which is called end; and their value lies in their capacity to produce this. One element in the means selected to any end must always be a certain expenditure of effort and energy by the agent; and this effort, being a means, has its value not in itself but for what it produces. Further the best means is that which involves the least expenditure of effort: thus the purposive activity has no value for itself, but implies an ideal in which it is wholly superseded, a state of affairs in which all our ends are realized without activity on our part. The ground of both characteristics is to be found in the severe abstraction of the purposive attitude. It examines a situation solely with a view to its possible contribution to a development regarded as desirable. But the elements which are capable of assisting this development have also a nature of their own, rich in other possibilities, and, even while contributing to the development desired, will also necessarily be assisting other developments which the limitations set by the purpose in hand will conceal from

view or dismiss as irrelevant. The agent, similarly, is a man with a human nature, of which this purpose and the effort it exacts from him is only a partial and temporary manifestation ; and if his individuality is to be saved, that can only be by some act and attitude which corrects and supplements purpose by a more concrete view of the situation. Purpose alone will never fully justify action to itself.

These very simple considerations suffice, I hope, to show what I mean when I say that any account of action in terms of purpose must be incomplete and defective. If their substantial correctness is conceded, it does not of course follow that there is no moral purpose : only that, if there is, it will provide an explanation of action exhibiting these defects. Probably, then, the best way to proceed will be to take certain admitted characteristics of the moral attitude and see how far these agree or are reconcilable with our diagnosis of the purposive attitude.

First, it is admitted by writers of widely different schools of thought that the claims of morality, as they operate in human life, present on the face of it a very different appearance from the claims of policy or purpose. They come as a recognized obligation to do or not to do, which is often seen to involve the temporary surrender or restriction of a desire in itself innocent, of a perfectly legitimate purpose. All serious moralists have had to recognize this very obvious and familiar contrast. Even the Greeks, in spite of their preoccupation with purpose, were unable wholly to deny the difference in kind between the moral and the purposive attitude. For Plato the virtue of the philosopher, who has passed beyond all calculation of profit and loss, is the only virtue which deserves the name. In Aristotle's *Ethics* the moral act is an act wholly inspired by love of itself : it is τοῦ καλοῦ ἕνεκα, i.e., directed to its own beauty or nobility ; and he makes no attempt whatever to show that this motive is merely an ultimate clarification of the motive operating in less deserving action. On

the contrary, he speaks always as if it were a motive peculiar to the good man and different in kind from others. It is not necessary to multiply instances. Butler speaks of the magisterial exertions of conscience ; Kant of the categorical, as opposed to the hypothetical, imperative ; and John Stuart Mill has to recognize as the most serious objection to the theory of utility, the apparently absolute and imperative character of the claims of justice. In explaining this absolute away as the socially salutary, but theoretically indefensible, conversion of a difference in degree into a difference in kind, he took the course which must I believe in the end be taken by all who believe that morality is purposive. In a word : *purpose will not yield "right" and "wrong."*

Secondly, let us consider the judgment of a spectator, or of the agent himself in retrospect, attributing moral value or disvalue to an action which has been done. It will be admitted that this judgment is often uncomfortably sharp and decisive ; but as much could be said of judgments recognizing failure in reference to purpose. The point is that here again there is an apparent difference in kind, which has to be explained away by the champion of purpose. Failure to button a collar, to mend a toy for a child, to secure election to an office—all these are mortifying in their degree. The aims differ in importance ; and one failure is more difficult to recover from, both in fact and in temper, than another. But what have these in common with the condemnation of treachery, or the remorse of the traitor ? The instances of purpose chosen are all cases in which failure or success declares itself at once ; but this is the exception rather than the rule. Often we must wait for years before we know whether our efforts are justified by success. But in moral judgment, many as the obscurities are, even in judging oneself, this complication never enters. Judgment is in no sense or degree conditional upon the actual event. In a word : *purpose will not yield "good" and "bad."*

Thirdly, it is generally admitted that the action upon which moral praise and blame are directed is something to which motive is central. An act done with a bad motive may, it is supposed, be right (*i.e.*, it may correspond generally in externals with the course of action which a good man in that situation would feel obliged to follow), but it cannot be morally good and deserving of praise. This seems to mean that in praise and blame the action is considered as the external expression of a spiritual state or activity, and that it is this activity as so expressed that is praised or blamed. Now clearly the typical end is a result external to the activity which helps to produce it. Often like victory, peace, prosperity, it comes as a longed for event or an ascent to a new level of life, closing a doubtful struggle on a lower plane. So obvious is this that our professed champion of purpose, the Utilitarian, can find no place for motive within the act. "Motive," in Mill's well-known statement, "has nothing to do with the morality of the action, though much with the worth of the agent." A good motive, he means, is one which normally issues in socially profitable action; but, if exceptionally such a motive issues in unprofitable action, we must not be deterred by habitual respect for a valuable motive from recognizing the badness of the act. Apparently, however, our estimate of the agent is not to be affected by our condemnation of the act, which amounts to a confession that this will not be a moral condemnation of the act after all. I have not finished with this point, but I will sum it up in the words: *purpose excludes motive from moral judgment.*

There offers in this connexion a rather tempting opening to a return to purpose by means of some notion of self-affirmation or self-realization. Many great names, including Aristotle and Spinoza, and, among moderns, T. H. Green and F. H. Bradley, might be cited as at least partially endorsing a purposive interpretation of morality in this sense. If the end is a state of one self (it may be argued) then the present state, by which it is to be

achieved, must be more than a mere means, since its externality to the end is broken down. The identity of the person through his successive acts destroys the contingency of the means in relation to the end. The means acquire a certain intrinsic value by their intimate relation to the end ; while the fact of growth and development of character still justifies a certain emphasis on future results. The self to be realized or affirmed in moral action is not (so Bradley tells us) the actual or particular self : it is a whole. It is not an exclusive self, "a repellent point or . . . mere individual" ; it is a social self. "The self which is myself which is mine, is not merely me." Thus the self which is realized both does and does not exist. So far as it does not exist, we are entitled to find purpose, achievement, controlled progress towards an end, in the moral attitude : for an end, as Bradley says, "is something to be reached, otherwise not an end." So far as it does exist, the moral attitude may be regarded as conferring absolute value on the actual, and we may say either that the notion of end drops out, since this self is not something to be reached, or that means and end here coincide. On these lines we are offered a reconciliation between purpose and its critics, which is to do justice to the truth contained in each of the opposing views.

I have not space to examine the foundations of this formula of self-realization. Bradley bases it on psychological considerations which to me are far from convincing. I do not think it is true that "in desire what we want, so far as we want it, is ourselves in some form, or is some state of ourselves ; . . . our wanting anything else would be psychologically inexplicable." Nor, even if that were accepted, would it follow that the moral effort is an attempt to achieve some state of ourselves ; for it is not self-evident that all action is the expression of desire. But the insecurity of these foundations is not our present concern. Whatever the arguments may be by which it is justified, the formula of self-realization owes its popularity largely to the fact that it

seems to offer an answer to the question, "Why should I be moral?" (this is the title of Bradley's essay from which I have been quoting), *i.e.*, that it appears to offer an interpretation of morality in terms of purpose and end. We must remember that it was advanced in fact by these English writers, as an alternative to utilitarianism. It is on this side that it requires examination here.

I fully admit that if we are to state morality in terms of purpose, we must make the end "ourselves in some form or some state of ourselves," and that self-realization, by offering such an end, escapes some of the worst inadequacies of other purposive interpretations. I would also admit that the doctrine of self-realization is sometimes so stated that none of the objections made above to a purposive interpretation seem to touch it at all. But I should claim that in these latter statements the element of purpose, which is not really essential to the doctrine, has been tacitly suppressed; and that where the interpretation is genuinely purposive, though the formula of self-realization is more adequate to the facts, in the sense that it makes possible a less viciously abstract view of them, it obscures the essence of morality quite as effectually as any other purposive interpretation.

Self-realization is conceived purposively when it is taken to mean the conscious development of the potentialities of the self by action, even if these potentialities are supposed to be such as will eventually be expressed in action. It is the future reference, the emphasis on development, that is crucial; and it is this that in my opinion is irreconcilable with the data of the moral consciousness. I do not of course deny that it is possible, legitimate, and even (within limits) laudable to aim at the development of one's character or at what we often call (following a usage fixed by Aristotle) moral improvement. What I maintain is that whole-hearted attention to this aim

will not ensure the rightness of the action in which it is expressed ; and that it is so far from being the essence of morality that in certain circumstances it may be condemned as immoral. I think that the formula of self-realization and the writings of those who maintain it lend themselves to the interpretation which I have given, and that in this respect it is a misleading doctrine.

The moral attitude is essentially a concern for the rightness of action. A true instinct exhibits it as interfering with the execution of purpose in stigmatizing as immoral the doctrine that the end justifies the means. The phrase implies that morality requires that all means shall be justified in some other way and by some other standard than their value for this or any end : that however magnificent is the prospect opened out by the proposed course of action, and however incontestable the power of the means chosen to bring this prospect nearer, there is still always another question to be asked : not a question whether in achieving this you will not perhaps diminish your chances of achieving something still more important ; but a question of another kind. "There is a decency required," as Browning said ; and this demand of decency is prepared to sacrifice, in the given case, any purpose whatever. If the call of duty were the expression of a purpose, it would have to be a purpose which embraced all purposes, from which all others could be shown as derivative, including all creation and even eternity in its scope. We are offered instead our own moral perfection. But what is that to put in the scale against the interests of humanity, the fortunes of countless generations yet unborn ? As judges of actions and motives we should rejoice to see a man jeopardising his own moral development when thereby he seemed to serve the "greatest happiness of the greatest number." Thus our moral consciousness assures us : (1) that the end does not justify the means, *i.e.*, that there

is no end whatever by which alone the detail of action can be guaranteed as right ; (2) that a man's own development or moral perfection is not the highest end to which his action can be directed.

Thus if self-realization is to be retained as descriptive of the moral attitude, it must, first, be deprived of all reference to the future. So far as morality involves the consciousness of doing right, it involves the affirmation and approval of a state of the self ; but this state is an actual state and is approved in itself, not as the germ of some future state. Secondly, the state which is approved has no essential self-reference at all. In it the concern for the rightness of action expresses itself in right action, and the action itself has such reference to self and others as the circumstances may dictate. The activity as a whole is no more properly described as self-realization than the activity of painting a picture, or working out a mathematical problem, or any other successful human enterprise. Thus self-realization becomes a purely formal conception which fails to touch the distinctive characteristics of the moral attitude.

So far I have been arguing that morality is not purposive ; that the hypothesis of a moral purpose is inadequate to the facts, whether the end proposed to it is outside the self (as " the greatest happiness of the greatest number ") or falls within it (as in the doctrine of self-realization). To complete my statement it is now only necessary for me to consider briefly the question of the precise place of purpose in the concrete act in which the moral value is realized.

Action is always the alteration of a situation, the state of the self being a feature of the situation altered : and, whatever else action is, it must always remain that. In deliberate action the situation is intentionally altered, and, since intention and purpose are inseparable, such action is purposive. If action is to deserve its name, to be fully willed (and evidently

much that passes for action is not fully willed), the alterations which it introduces must be intentionally introduced. Thus here again there can be no going back. The concrete moral act must be the alteration of a situation, and that alteration must be intentional: the act must be purposive. This means that the agent must needs accept judgment by results. Failure is failure; and its bitterness is not diminished, rather increased, by the conviction that the energy spent fruitlessly in it had another justification. The adequacy of the means adopted in action to the end proposed--and not merely to the end actually in view at the time, but to that in relation to other ends and purposes adopted by the agent; and in relation, further, to the communities of which he is a member and their life and activity--the accurate diagnosis and adjustment of this far-reaching causal nexus is the internal logic of the act, the test by which the agent himself in the moment of action implicitly claims that it shall be judged. If it fails by this test, it fails; but the fault, if fault there be, is a fault of knowledge, of judgment, of imagination, of breadth of vision; never a moral fault. The act is not shown to have been wrong. Complications arise in fact owing to the limitations of knowledge, the different kinds and sources of ignorance, unforeseen contingencies, and so on; but here these may be ignored, and we may say simply that this is the field of purpose and in it action is discriminated by achievement and non-achievement, failure and success.

Morality is to be regarded as supervening upon purpose in the sense that in the moral attitude everything that belongs to purpose is before the mind and none of it is denied. Moral considerations do not arise upon further exploration of the causal nexus, or by the introduction of some wider and deeper purpose, or by the transference of the purposive problem from a purely individual to a social plane. Purpose must complete

its own work, which includes all this ; but when its work is completed, the problem of conduct is not yet solved. The moral consciousness supervenes with a further demand, which creates the specifically moral aspect of the problem. Until this demand is satisfied no project of action may be passed for execution. The demand is, in short, that the activity of securing a certain many-sided result by a course of action at every point manifold in its implications shall be seen to be in all its stages a fit expression of the human will. The inquiry dictated by this demand differs from inquiries undertaken in the interest of purpose in three main points. First, the action is regarded not as a contribution to the world's welfare, but as a case of spiritual activity or self-expression. Secondly, the transitive character of the process, with the inevitable emphasis on the issue, thus drops into the background : the activity has to justify itself as a whole and in every moment. Thirdly, the values recognised are intrinsic and absolute, not relative and conditional like those of purpose. A project of action which survives this inquiry passes into action which can claim to be fully justified and to be morally justified, and to have a value in itself apart from its results.

The concrete moral act, then, is purposive. If it served no purpose, it would be pointless, and what is pointless cannot be right. But it is a familiar fact that morality often interferes with the execution of our purposes ; and it seems that it is just in such conflicts that the most unquestionable moral values are revealed. Surely in such cases at least (it may be urged) morality must supply some purpose of its own, if we are not to be left with a void, with an act which is no act because it is pointless. On this I have two remarks to make. (1) Man has many purposes and interests, and no attempt to reduce them to one has ever been successful. A line of action which obstructs one purpose will assist another. And, in fact, it is impossible to find a moral

command or prohibition which has no support from expediency, though in many cases proof may be unattainable that the line of action enjoined is the most expedient open to the agent. Thus the action need not be pointless because it runs counter in its effect to the ruling purpose

(2) What morality approves or rejects, in part or as a whole, is a concrete purposing, not in general or in respect merely of its direction, but as worked out in its full detail and in every detail of it. To this its response is immediate and intuitive. The moral judgment, like the æsthetic judgment, does not argue and cannot be argued. All that can be done, in case of dispute, is to call attention to details in the object for which approval or disapproval is claimed, which may have escaped attention or received less than their proper weight. Hence the main part of the discussion of a disputed moral judgment will be conducted in terms of means and end, and will concern what are called the consequences of the act. The rest will be a reassertion of the variance of the intuitive judgment at each point. It is this that gives rise to the illusion that the whole dispute can be reduced to a question of means and end. But though the judgment is immediate and intuitive and cannot be argued, yet in morality, as in art, reflective analysis can detect principles at work in it. To extract these principles and define them is the main task of the branch of philosophy which has morality for its subject. The whole history of ethics suggests that any sound analysis of moral judgments will find at work in them, not merely a conception of the dignity of human nature, of its proper organization and deportment, as something to be maintained by the individual agent in all his actions, but also of the relation of man to man in society and in a spiritual kingdom, perhaps, to which religion alone gives entry. But when the philosophical analysis has been completed and the metaphysical foundations of the moral judgment have been finally laid bare, we shall have to

recognize that these principles were all along operative in shaping human desires and the purposes in which they are co-ordinated, and that the limitations imposed on desire by purpose and on purpose by morality were therefore no external and arbitrary interferences but corrections demanded by the inner logic of the impulse or purpose itself. Πάντ ἀγὰρ φύσει ἔχει τι θεῖον.



II. *By W. G. DE BURGH.*

(i.)

I will state the point in Prof. Stocks' argument to which I take exception as a syllogism in the second figure, viz. : Purposive action consists in the adoption of means to an end ; moral action *quâ* moral excludes the adoption of means to an end ; therefore moral action *quâ* moral is never purposive. In this syllogism, I accept the minor premiss but dissent from the major. And the conclusion seems to me untrue. In arguing this point, I shall refer not only to his paper for this Symposium, but, where necessary, to his article on "The limits of purpose," in the *Hibbert Journal* of last October.

"Purpose," says Prof. Stocks (*Hibbert Journal*, p. 62). "involves by general agreement a distinction between the means and the end. The means represent the best available path in the circumstances to the result which is purposed as end." If this be so, morality is not purposive. For "in purpose, means and end necessarily fall apart" (p. 63), but "morality cares nothing for results" (*Hibbert Journal*, 67) ; its imperatives are absolute, its judgments "immediate and intuitive" (p. 74). "final and irreversible" (*Hibbert Journal*, 67). Purpose, being merely the direction of effort to bringing about a certain result or type of result (*Hibbert Journal*, 58-59), has nothing to do with the morality of a volitional act.

But is purpose rightly thus restricted to the selection of means to an end that is external and parasitic ? And is "end" synonymous with "result" ? I hold that in moral action the willed act (meaning by this what the agent inwardly wills to do)

is an end in itself, that in willing what is right in the particular situation, the agent wills therein right absolute and universal, as the principle informative of this and every other particular moral act. I hold, moreover, that such volition is the expression of rational purpose. Purposive action is not limited to the taking of means to an end supervenient upon the purpose (*Hibbert Journal*, 64). It covers also the volition of an act as an end in itself. I take my stand, in principle, on the Kantian analysis of moral experience.

Hence, when confronted with the questions put by Prof. Stocks in his opening paragraph, as variants of a single issue, I must discriminate before I answer. When he asks whether a moral agent acts with "an end, aim, or purpose in view." I reply, "Yes." When he asks whether the judgment that this act is right allows "of such analysis that the act may be seen as means to an end," I reply, "No." I claim, in short, that what is willed may be willed for its own sake, and yet be purposive.

(ii.)

I begin by noting an ambiguity in Prof. Stocks' use of the term "purpose." He applies it, first, within the field of practical activity to denote the direction of effort to bringing about a result, *i.e.*, to Utilitarian as distinct from moral action. The man who subscribes to a charity in order to win the support of his constituents performs such a purposive act. The term is here used in a natural and proper sense; my only quarrel is with the exclusion from its sphere of acts done as ends in themselves. But, later on (p. 72), purpose is applied to something that is not action at all, *viz.* to the theoretical diagnosis of the situation before the agent's mind, a diagnosis which indeed conditions action, but which, as preliminary to action, is other than the action that ensues. Failure in the diagnosis is not in itself practical failure, though practical failure is the inevitable

consequence ; it is rather, in Prof. Stocks' words, " a fault of knowledge, of judgment, of imagination, of breadth of vision ; never a moral fault." So moral action (and, as we shall see, utilitarian action also) can be said to " supervene upon ' purpose,' in the sense that in the moral " (and also in the utilitarian) " attitude everything that belongs to purpose is before the mind and none of it is denied." How can we deny what is manifestly a datum of existing fact ! If we take purpose in this sense, all reflective action must be regarded as supervening upon purpose. It is not only when I do what is right for its own sake, but when I act with a view to my own happiness or to that of others, that I take stock of the possibilities of the situation before acting. The man who subscribes to a hospital from self-interested motives will reflect, before he draws his cheque, on the status and needs of the institution, on his own financial position, and on the probable consequences of this and other alternative projects of expenditure, equally with his fellow who subscribes from the pure motive of duty. Let it not be said that, in the former case, the act is explicable wholly in terms of the relation of means to end revealed in the preliminary diagnosis, while in the latter alone the intuition of moral rightness emerges as a new factor. In both cases alike, there is a gulf to be bridged between the data before the mind and the supervening recognition ; in the one case, that this act is expedient, in the other, that it is right. This ambiguity entails serious consequences for Prof. Stocks' argument. If we take purpose, in the first sense, to mean purposive *action*, and confine it, with Prof. Stocks, to the practical choice of means to an ulterior end, it is alternative, and not preliminary, to moral action. We cannot here maintain that morality supervenes upon purpose, or that purpose has any place whatever in the concrete moral act. If, on the other hand, we take it, as referring to contemplated purposive relations, purpose is a feature common, as antecedent,

to all reflective action, moral and utilitarian, alike. But, when thus interpreted, the purposiveness falls outside the moment of valuation. "The concrete moral act," writes Prof. Stocks (p. 73), "is purposive. If it served no purpose, it would be pointless, and what is pointless cannot be right." I entirely agree, but I fail to see how the recognition of purpose in the apprehended data lends purposiveness to the concrete moral act. The moral consciousness supervenes upon purpose with its intuition of intrinsic value. Take the case, contemplated by Prof. Stocks (*Hibbert Journal*, 65 67), where a man recoils in the name of duty from a utilitarian action. He refuses, let us suppose, an offer of shares in a highly remunerative business, because he judges it wrong to draw profit from a factory that sweats its workmen. He lets "the internal logic of the act" go by the board. His rejection of the preferred advantage will seem, Prof. Stocks tells us, wholly irrational to "the merely practical and purposive" observer. But, if we accepted his limited interpretation of purpose, must it not seem equally irrational to Prof. Stocks? The fact that it is impossible to find a moral command or prohibition, that has no support from expediency, that "a line of action which obstructs one purpose, will assist another" (p. 73), does not help to solve the difficulty. Reasons of this sort can doubtless be found for anything, even for doing what is right. But what have results to do with the morality of the act? The right act is performed, not because of the reasons, but simply because of its intrinsic rightness. The agent has reckoned already with the reasons in the course of his preliminary diagnosis; when once the moral intuition has supervened, he treats them as irrelevant, does his duty, and damns the consequences. It is only when his act is challenged, that he falls back on the reasons to support his moral intuition. And, as Prof. Stocks has clearly shown, they afford, at best, a partial and inadequate justification.

If, therefore, with Prof. Stocks we confine purpose to the category of means and end, it cannot be "absorbed and transformed" (*Hibbert Journal*, 68) in the concrete moral act. The moral consciousness can only "supervene" upon purpose as an irrational intruder. Of course, morality will not for a moment acquiesce in this paradoxical limitation. What is pointless cannot be right, and what is right cannot be pointless. When we speak of moral action as right and reasonable as such, we mean what we say. The moral intuition is an intuition of practical reason, and reason, alike in speculation and in practice, covers a wider field than ratiocination. The purposiveness of an act which is a means to an ulterior result is defective in purposiveness and rationality, when judged by the more concrete purposiveness of the act which is an end in itself.

Prof. Stocks seems aware of this, when, in his closing paragraph, he outlines a more adequate view of the relation of morality to purpose, but one which it is not easy to reconcile with his earlier interpretation. He tells us (p. 74) that it is the main business of Ethics to elicit and define by reflective analysis the "principles" that are at work in morality. If, when this task has been accomplished, we work backwards from morality to less developed types of conduct, we find "that these principles were all along operative in shaping human desires and the purposes in which they are co-ordinated, and that the limitations imposed on desire by purpose and on purpose by morality, were therefore no external or arbitrary interferences, but corrections demanded by the inner logic of the impulse or purpose itself" (p. 75). In other words, morality, far from supervening upon purpose as an alien intruder, is present in some degree, though implicitly and unbeknownst, in purposive action from the outset. The moral consciousness is presupposed in every volition of a moral agent. All purposive action is *sub ratione boni*. Now, if this be so, the category of means and end is never adequate to express "the

inner logic of purpose." Even the utilitarian act refuses to be confined within its limits. We are led to the conception of an end which is not the future result of an action, but is immanent throughout the purposive process, and to an enlarged conception of purpose in which the distinction of means and end, with its implications of externality and contingency, is *aufgehoben* in a higher synthesis. Prof. Stocks (p. 64) criticizes such a view as a "loose and misleading" attempt to slur over the difficulties of the problem. But I cannot see how, on any other alternative, morality can be regarded as a development of purpose, provoked "by the inner logic of the purpose itself." If we limit purpose as Prof. Stocks would limit it, the concrete moral act, far from being purposive, remains "an external and arbitrary interference" with purpose. In so far as it is moral, it is non-purposive and pointless (*cf.* "the moral non-purposive attitude," p. 64); in so far as it is purposive, it is obstinately non-moral. The two-mindedness in Prof. Stocks' treatment of purpose is discernible in the admission (p. 64) that "purposive activity implies an ideal in which it is wholly superseded." If, on the one hand, we stress the implication, the ideal reveals itself, not as the supersession of purpose, but as its consummation. Purpose does not cease to be purpose in overcoming the obstacles that beset its execution. If, on the other hand, we insist on the supervision, the ideal is not implied in the purpose, but supervenes upon it *θύραθεν* from without. In this case only can purposive action be properly interpreted in terms of the category of means and end. An examination of that category will determine our choice between the two conflicting views of purpose.

(iii.)

Prof. Stocks, both in his paper and in his Hibbert article (58-59), points out the abstraction involved in the

concept of means. The concrete situation is assessed and handled in view of a single result, given and presupposed, to the neglect of a multitude of residual features, irrelevant to the end, though capable of serving as means to other conceivable ends. Its individuality is subordinated to an abstract character, which alone has value for the purpose in hand. But the concept of means is abstract also in a further sense, in that it implies reduction of the concrete processes of thought and volition to terms of discrete and static entities. In analysing a purposive action into means and end, we break up its living unity into lifeless factors, externally conjoined : we translate " acts " into " facts " or " things." It is just as when we study the score of a musical composition, gaining thereby insight into its structure, but losing the unity and life that informed its creation and performance. The concept of means is, therefore, applicable in strictness only to inanimate material objects, like a cricket-bat or a pile of gold, regarded as of significance, not in their own right, but as possibilities for use in the service of human ends. The moment they are actually being used, however, they cease to be mere instruments and become partners in the concrete transaction, with a share, be it only to a minimal extent, in its intrinsic value. Thus we get fond of a pipe or of a suit of clothes, regarding them, in such moods, not merely as means, but in a certain sense as ends in themselves. We look upon them, in fact, as part of ourselves. The same is true of the material possessions of others, in so far as they are associated in our minds with their owners' purposive activity. Next, let us consider cases of human action that are avowedly utilitarian, such as the building up of a business or the conduct of a political measure, eliminating any thought of a possible moral motive in the background. Unless the term purpose be robbed of all meaning, such courses of action must be allowed to be purposive. I do not question that certain phases of the process can legitimately be taken in isolation and

regarded as means to a result. But there is something artificial in this analysis. The natural term for the agent to use is "plan" or "policy," in reference to the unity of purpose which controls the entire process as an immanent end, and is exemplified, more or less significantly, in each of its details. The plan, initially present to the agent's mind as a relatively indeterminate *schema*, develops to full determinateness in the course of execution, not by addition of extraneous matter, but rather by inner adjustment to the changing situation of fact. What is willed at the outset is not merely the first step in the execution of the plan, but the plan itself as a whole, *e.g.*, the conception of the business as established or the Bill as approved by the Cabinet and presented to Parliament for enactment. Even in the latter instance the determinateness of form is not such as to preclude subsequent modification of detail in response to changes in the practical situation. The preliminary diagnosis is never adequate to the reality, and all action is in some measure action in the dark. So, in writing a book, the scheme of the work gains definiteness in the very act of moving the pen across the paper. When the process is accomplished, the business founded, the Bill passed, the book written and sent to the printer, how futile and unsatisfactory is the endeavour to sum it up in terms of a result ! Doubtless the result is there, and I can say, in a moment of complacency or on the hustings, "*exegi monumentum*".—See "what the Government has done for the working-man !" Yet if I have not merely lived, but am still living, the *fait accompli* is already fading into oblivion, and the old purpose has generated fresh purposes, the extension of the established business, further measures of social amelioration, the solution of new speculative problems. "There is no felicity save in proceeding." The value of the process, if value it had, was intrinsic to the process, not to the result ; it lay in the doing of it, from start to finish, rather than in the thing done.

Thus the so-called Utilitarian act is never purely Utilitarian, and resists interpretation in terms of the distinction of means and end. For (a) the intuition of the end, say, our own material advantage, informs and directs the entire process, whether of deliberation or of action. To the man who is out for self-interest, the facts of the situation are envisaged as qualified prospectively in relation to his dominant motive ; just as to the moral agent they present themselves from the outset as opportunities for the performance of duty. Nor (b) is the moral motive ever wholly absent, even when obscured and counteracted by antagonistic inclinations. The alternative of duty, though rejected in the event, is in some degree before the mind, exciting its appropriate desire, throughout the deliberative process. Hence (c) a man may easily deceive himself as to his motives and believe that he is acting from duty when he is in fact acting from self-interest, or *vice versa*. It is a simple thing to direct the intention without being aware of it. To J. S. Mill, for example, the Utilitarian maxim appeared in the guise of a moral intuition, robed in all the panoply of duty to be done for duty's sake. This accounts for the incoherence of his effort to justify disinterested action in the light of his theory ; *e.g.*, his conviction that virtue, which could only be vindicated on Utilitarian ground as a means to the general happiness, was, not a means, but a " part " of happiness, in other words, an end in itself. I fully agree with Prof. Stocks that Utilitarian action is never self-justifying, in that every purpose is pregnant with new purposes, and points beyond itself to an ideal.

No finite purpose can be complete at any moment of its temporal history. But this does not entail the denial of intrinsic value to the fragmentary purposes ; still less, the admissibility of its interpretation by the category of means and end. The fulfilment, such as it is, is not confined to the close of the process but is immanent throughout ; in Aristotelian phrase, the process

implies "act." Nor does it annul the real difference of kind between Utilitarian and moral action. That distinction holds not because action for expediency implies the selection of means to a result, while moral action has no concern either with result or means ; but because of a difference of ends. Moral volition is volition of an end that is, in the true sense, universal. To explain this difference we must pass to the consideration of moral action.

(iv.)

In moral action we will to do what we judge to be right, because we judge it to be right. The act is recognised intuitively as right in itself, not as means to a result. Right, *i.e.*, does not mean conducive to good. In other words, nothing is morally good without qualification but the good will. It follows that rightness is a character possessed in common by every moral act, and as such cannot be accounted for in terms of the particular features that distinguish one moral action from another. It is a universal, not as a character separable in reality from the particular constituents of the act—for such universals do not exist ; but as "covering" (in Cook Wilson's phrase) its whole particularity so that every detail in the act is a detail not only of the act but of its rightness. Moreover, since every particular right act is a particular of rightness, the universal is not exhausted in any single moral act, but is both immanent in and transcendent of any and all alike. I cannot will duty in the abstract, but only this duty here and now. Yet in willing this duty I will therein duty universal, an end that is at once intrinsic to and incommensurable with the particular volition. Such is the principle revealed by reflective analysis as at work in the simplest act of moral volition. To have made it explicit is the enduring achievement of Immanuel Kant.

If we accept this analysis--and I cannot see how the facts admit of any other-- it carries with it the following implications.

(a) There is a difference, not of degree but of kind, between moral and all other purposive action. All other ends are particular ends, admitting of formulation in empirical terms: the moral end is universal and defies such formulation. This distinction is familiar to all readers of Croce's *Filosofia della pratica* and needs no further elucidation.

(b) The concept of means, which has a limited application to Utilitarian action, is here entirely devoid of relevance. The moral purpose is not directed to a result, but is intrinsic to the action, which is willed as an end in itself. If, as may well be the case, certain phases in the process stand in relief as of critical significance, these are robbed of their moral value, when regarded in isolation from their antecedent grounds and subsequent issues. "We speak no doubt in careless metaphors--as if, in every sphere of spiritual endeavour, there 'supervened' upon dark periods of mere blundering and struggle, 'punctual' (or 'timeless') flashes of enlightenment. But does anybody seriously believe in a 'creative vision,' an 'intellectual insight,' a 'moral decision,' which are *post*, not *propter*, the antecedent struggles; which are 'single,' to the exclusion of inner difference, 'quiescent' and 'stable' without inner movement and tension?" (Prof. H. H. Joachim, in *J. of Phil. Studies*, April, 1927). Results come into play when we analyse the situation of fact antecedently to the moral intuition or when we attempt to justify the action subsequently to its performance. But the act, if right at all, is intrinsically right; if wrong in itself, it cannot become right by virtue of anything extraneous. Prof. Stocks admits this; but is driven by his arbitrary definition of purpose to regard the morality as "supervening" upon purpose, by a relation as external as that of end to means.

(c) It is true that purposive action, moral or utilitarian, is never wholly self-dependent, but implies materials and an environment that stretches indefinitely beyond the immediate field of purpose. The agent's freedom is conditioned, and often thwarted, by what lies apparently outside the scope of his intention. But we must realize the relativity of this distinction. The so-called materials are never merely external to the end, but rather constituents of its expression. The poet finds inspiration in the world around him; his poem is a thing he "half creates and half perceives." So in the moral life, the seeming obstacle proves to be not a thing, but an opportunity; suffering appears inseparable from joy, and the self first wins free expression in the response given back from the hand or heart of another. The relation of end and means, even that of a design to its materials, is inadequate to express the facts. A graver problem arises from the fact that no moral action, whatever its intrinsic value, is self-contained; it is but a stage in a moral life, which is ever fragmentary and incomplete. Duty generates duty, and, at the close of the agent's temporal history, remains still unfulfilled. The universal end, immanent in the volition from the outset, fails to find adequate embodiment in any series of particular actions. We strike here upon the inherent paradox of morality, that its imperative can never be realised in fact.

(d) The moral end, again, is formal, in that it transcends the limits of any assignable content. "Man," says Prof. Stocks, "has many purposes and interests, and no attempt to reduce them to one has ever been successful" (p. 73). Such an attempt is bound to fail, if its aim be to express the universal as a sum or synthesis of particular satisfactions. "If a thing has a price, something can be substituted for it as an equivalent; what is above all price, that for which no equivalent is admissible, that has dignity or worth." To have seen this clearly and to have insisted on the pure formality of the moral principle, far

from being a ground for criticism of Kant's ethics, constitutes their crowning merit. The moral principle is ultimate and therefore indefinable; we can say, it commands this or that; we can never say, it is identical with this or that. So we find Prof. Stocks admitting (p. 70) that "if the call of duty were the expression of a purpose, it would have to be a purpose which embraced all purposes, from which all others could be shown as derivative, including all creation and even eternity in its scope."

(c) It follows that all attempts to interpret the moral end as self-realization are doomed to failure. That the self is active and affirms itself in moral volition is a platitude; that the object of my will is self-satisfaction is manifestly false. In his *Ethical Studies* (Essay III), Mr. Bradley seems strangely enough to fall into the same fallacy as the Hedonist, who identifies the pleasure felt in the satisfaction of desire with the object to which the desire is directed. While accepting Prof. Stocks' criticism in principle, I cannot agree that, if we are to state morality in terms of purpose, we must make the end "ourselves or some state of ourselves" (p. 69). For the same reason, I cannot go all lengths with Kant in his doctrine of autonomy. On the one hand, in willing morally we are autonomous, for it is our reason that issues the command. Thus far, *pace* Prof. Stocks, morality entails self-development. On the other hand, we are never purely autonomous, for the command is to will the universal, and the universal transcends the bounds of self-hood. Kant's recognition of this transcendence was frustrated by his untenable theory of the noumenal self. It is the paradox of reason, alike in knowledge and in practice, that the individual is thereby enabled to apprehend and to will what, as absolute and universal, carries the self beyond the self. Hence, moral action, like Utilitarian action, fails in the end to be self-justifying. In morality, the self-conscious will is both satisfied and dissatisfied with itself (*Hibbert Journal*, 68). The dissatisfaction -- "we

have *not* done that which it was our duty to do"—has its ground in the fact that the end willed is "a purpose embracing all purposes . . . including all creation and even eternity in its scope."

(v.)

The view of the moral end, which, following Kant, I have here outlined, inevitably raises large questions, both of metaphysics and ethics. I fully realize that my paper is incomplete in so far as I have left these questions unconsidered. This is notably the case with two of them. (a) There is the problem of the relation and implications of the terms "right" and "good." I would merely point out that I cannot accept Kant's exclusion from the field of morality of desire for the good (Spinoza's *amor erga rem æternam et infinitam*) as distinct from the motive of duty for duty's sake; or his artificial doctrine of the "object of practical reason" (*bonum consummatum*) as an arbitrary conjunction of moral goodness and happiness. The value of Kant's ethics is not destroyed, but enhanced, when it has been purged of the dualism of noumena and phenomena. At the same time, I recognize with Bradley that "good" is a term of wider scope than "moral good." (b) Reference has been made more than once in the preceding pages to the limitations inherent in morality. In morality, the moral command is never fulfilled, and the "ought" obstinately transcends the "is." We are confronted here with the relation between fact and value. Moreover, the problem of Time looms ominously in the background. For morality, again, the moral end is an abstract principle. Prof. Stocks suggests that "any sound analysis of moral judgments will find at work in them . . . a conception of the relation of man to man in society and in a spiritual kingdom, perhaps, to which religion alone gives entry" (p. 74). I entirely agree; but to pursue this line of speculation would carry us far beyond the limits of the present Symposium.

III. *By* W. D. Ross.

The natural meaning of the question, "Is there a moral end?" seems to be: "Is there a single type of thing, or of state of affairs, which will be produced by all right acts, and the producing of which is what makes them right?" If there is such a thing, it is properly called an end and the act is properly called a means to it. The most familiar theories which hold that there is such an end are the egoistic and the utilitarian (or universalistic) variety of hedonism. These theories are now to a large extent discredited; not, however, because the whole view that right acts are right because they are means to a certain end is discredited, but because the particular end selected by these theories is commonly recognized not to be the only thing worth aiming at. It is commonly recognized that, for instance, moral virtue is a state worth our trying to produce, whether in ourselves or in others, independently of the question whether it is accompanied, or followed, by pleasure. Thus, while the general notion of means and end is retained, a more satisfactory end is proposed, viz., one which includes virtue and knowledge, and perhaps some other things as well, besides pleasure. Such a view is, I think, not to be set aside by the consideration that the relation between means and end, or, in general, between cause and effect, is "external" or "contingent." External it certainly is; contingent it is not. If certain effects are annexed to certain causes by the laws of physical or of human nature, there is nothing unworthy in asking us to take account of such laws and to shape our action accordingly, and "external" and "contingent" would seem, in this context, to savour of the fallacy of dyslogistic epithets.

It is on a different ground that, as it seems to me, such a theory must be rejected ; on the ground that it is not in accordance with what we actually judge about right or duty. It is perhaps most clearly in connection with the generally recognized duty of keeping promises, and in general of fulfilling undertakings which we have explicitly or tacitly entered into, that this failure is seen. It seems clear that the peculiar stringency which we think to attach to this obligation does not rest on any conviction of the great good to be brought into being by keeping promises. There are cases in which, so far as we can see, a greater good would or might be brought into being, even in the long run, by ignoring such an obligation than by fulfilling it ; *e.g.*, by giving our money to a deserving person than by paying our debt to an undeserving one. Yet we feel that this does not settle the moral question in the sense of making it our duty to ignore the obligation in question. If we ask ourselves why we ought to fulfil promises, we answer our question not by pointing to the good to be brought into being, but by pointing to the fact that we *have* promised. In other words, the rightness of the act seems to depend not on its causal relation to a future good, but upon its peculiar relation to a previous act of our own. Nor is the fulfilment of promises the only instance in which the category of means and end is seen not to cover the *whole* field, at any rate, of duty. The duty of gratitude also is one which seems to depend on the relation of an act of gratitude or of ingratitude, not to anything in the future but to something in the past. And so is the duty of reparation. It is on such grounds as these that the doctrine of ideal utilitarianism, the doctrine that what is right is simply what is productive of the greatest good, has to be rejected. But with its rejection we let ourselves in for a serious difficulty. For it seems equally clear that many of the acts that we think it our duty to do have their whole point *not* in the change that we produce directly by our

action, but in some future good to be produced only indirectly. It would seem as if our duties fall into two classes—those that are right because of their intrinsic nature, as fulfilment of promises or reparation for injuries or the like, and those that are right because of their consequences, *i.e.*, as means to ends.

Further consideration will show, however, that right acts do not fall into these two heterogeneous groups—that in both alike we have to take account of causes and effects, and that in neither is it our duty, essentially, to do certain acts because they are means to good ends. Let us take first the first group—the duties of perfect obligation, where our duty *seems* at first sight to exclude the distinction of means from ends, and seems to be a duty to do a single act whose rightness is rooted in the nature of the act, and to “damn the consequences.” This is, I suppose the way we feel about such a duty as that of fulfilling promises. It is, I repeat, clear that such an act seems to be our duty apart from any consequences it may entail, and in its own right. But it is to be noticed that even here what we do *directly* is often, if not always, pointless in itself and derives its rightness from one of its consequences. Take, for instance, the duty of returning a borrowed book. Here it is often out of my power to return the book, by a direct act, to the lender. He may be at a distance, and the only way of securing his reception of the book may be that I should post it to him. This is what I *do*, and his receiving it is a result of this; and what I do seems to be pointless in itself and to receive point and justification only when regarded as a means to an end other than itself. So far, it looks as if we were going back to the utilitarian view that action when right is right because it is a means to a certain end, and were merely substituting for the single end—the general happiness or, more widely, the general good—in this case a particular end, the receiving of the book by the lender; as if we were

returning to utilitarianism but recognizing a greater variety of ends to be aimed at.

But a closer consideration will show that this is not the conclusion to be drawn. For if we ask ourselves what is the act which we consider to be essentially, in its own nature, right, that to which the attribute "right" properly and directly belongs, we see that it is not, for instance, the posting of the book regarded as the posting of a book, but the posting of the book regarded as being at the same time the securing of the reception of it by its owner. It is this and this alone that is *as such* right. And this is right not because it is a means to an end, but just because of its relation to a previous act of my own, that of borrowing the book with an explicit or implicit promise to return it. If, then, that which most strictly is right is right not because it is a means to an end, but for quite a different reason, it follows not merely that "right" is not equivalent in *meaning* to "productive of good" or "productive of the greatest possible good" (which is indeed self-evident), but that rightness is not even necessarily coincident in fact with productiveness of such an end.

The fact is that the act in question may with equal truth be described as the posting of a book and as the restoration of his property to the lender, and that it is in the latter capacity and not in the former that it is right. Or if this be objected to on the ground that I cannot be said to have restored his property to the lender when I have thus acted, since his reception of it is still in the future, we may amend our statement by saying that the act of posting the book is at the same time an act of *securing* the reception of his property by the lender.

But, it may be said, I have not by posting the book even secured the reception of his property by the lender; it may be destroyed or lost or stolen in transit. The answer is that in that case my act is not right. My duty is to get his property

into the possession of the lender, and if I fail in this, I have failed in my duty. The issue is simple. If the book reaches its destination, that shows that, the nature of the railway trains, the postmen, and the other persons and things concerned, being what it is, I have done what was necessary to secure the book reaching its destination, and have done my duty; and if not, not. And that I have done my duty in the first case and not in the second is shown by the fact that in the second case and not in the first it becomes my duty to make reparation by sending an equivalent. Thus the objection merely reinforces our contention that it is not the posting of the book but the securing of its reception by its owner that is right or my duty, and that this is right not because of its consequences, but because it is a fulfilment of my promise. In this whole type of case, then, it seems clear that, while in choosing what physical act I shall immediately perform I have to take account of a chain of causes and effects, that which is right is right not because it is the cause of a certain effect, the means to a certain end, but because of its nature in relation to a *past* act.

We may now turn to the class of duties which at first sight seem so different from the duties of perfect obligation. It might seem that when we are not acting in fulfilment of an undertaking, but to promote the happiness or moral goodness of some person or of society, here at least our act is right (when it is right) because it is a means to an end. But on reflection a similar analysis is seen to apply here too. If, for instance, I write a cheque in order to help the funds of a hospital so that it may be able more effectively to diminish the sum of human suffering, it is not as being the writing of a cheque, nor as being an adding to the income of a hospital, but as being the securing of a diminution of pain, that my act is right. That which is, strictly speaking, right is my act of securing a diminution of pain, and this is right just because it is that, and not as a means to a further end. In

fact, as before we had to recognize a class of acts which are right because they are the fulfilment of undertakings, and not as means to an end, so we now have to recognize another class of acts which are right because they are acts of securing the diminution of pain. And the same type of analysis will apply to any other case of duty.

In what I have said, however, there is a certain improper abstraction which must now be corrected. I seem to have set up two absolute principles of duty—"fulfil promises," "diminish the sum of pain in the world"; and on similar grounds I should have to recognize other principles of duty—"make reparation for injuries," "tell the truth," "bring about a just distribution of reward to merit," "promote virtue," and so on. And any such list of general laws is open to the obvious objection that in many cases they come into conflict. Sometimes I cannot fulfil a promise to one person without bringing great suffering on an innocent third person, and it has to be admitted that *both* the principles involved cannot be absolute. And, further, we actually judge that in some cases the one should be obeyed and in some the other, so that it is clear that we do not really judge *either* to be absolute. Yet it would be artificial, as I have urged, to seek to merge the duty to fulfil promises in some wider duty to promote the general good: it has a stubborn character of its own which resists any attempt so to merge it. Whatever obligatoriness the act of fulfilling a promise has it owes *not* to its contributing to a further end, but to its relation to the previous act of promising. The only way of saving the absolute character, in some sense, of the particular principles of duty, while yet we face frankly the problem of the apparent conflict of duties, is to recognize that the rightness of fulfilling promises, and equally that of promoting the general welfare, or of making reparation for injuries, and so on, is only a *prima facie* rightness or a tendency to be right. In fact their

absoluteness is to be saved just as we save the absoluteness of laws of nature, by stating them as laws of tendency and not of actual behaviour. If you state the law of gravitation as saying that bodies move towards one another in such and such a way under the influence of mutual attraction, you are met by the fact that when they are acted on by other forces as well they do not in fact move so; and we rescue the absoluteness of the law by stating it as a law of tendency. So, too, it is always *prima facie* right, it always tends to be right, to fulfil a promise; but since the act of fulfilling a promise is at the same time the securing of a state of affairs which may in some respects be bad, the fulfilment of a promise need not always be absolutely or actually my duty. The act is or is not my duty according as its *prima facie* rightness *qua* possessing certain characteristics is greater or less than its *prima facie* wrongness *qua* possessing certain others.

I have argued, so far, in agreement with both my colleagues, that right acts are not right because they are means to an end. For this Prof. de Burgh substitutes the view that they are ends in themselves. I should not use this language myself, because I think that "end" is commonly used, and is most conveniently used, as correlative to "means," as "means" is certainly correlative to "end." To describe a right act as an end in itself is, I suppose, a sort of intentional paradox. It is to say that while most of the things we really desire to get cannot be got direct, but only by adopting means, here is a thing which we desire to get and yet can get direct. And there is, I think, no objection to this usage, except that to call an act an end is apt to suggest that there is something else which is a means to it, whereas the intention is to say that no means at all are involved.

In this usage, which I deprecate as inconvenient but cannot describe as wrong, "end" comes to be equivalent to "purpose," where "purpose" is used of the thing proposed and not of the

mental activity of proposing it to oneself. If that be all that is meant by "end," it does seem to be right to say that there is a moral end. There is something that we propose or hold before ourselves before we do a conscientious act, and a single thing that we hold before ourselves in all such cases, viz., the rightness which we believe the act will possess. But we should not speak of the purpose of the act, which at once suggests something beyond the act, to be achieved by the act; we should speak rather of the (objective) purpose (*propositum*) implicit in the act, or of our (subjective) purpose (*propositio*) in acting. This is indeed what distinguishes a truly moral, i.e., a conscientious, act from one that is prudential—that which we set before ourselves and which attracts us to the act is something to be achieved in and not by it. But a conscientious act is not the only kind of act that has this character. For it seems equally true that there are acts to which we are attracted not by some result to be achieved by them but by the pleasantness implicit in them. This seems to be the character of the playing of games and perhaps also of artistic creation. Thus genuinely moral action has to be distinguished from prudential action by the fact that its *propositum* is achieved in and not by it, and from certain other kinds of action by the fact that the *propositum* implicit in it is its rightness and not its pleasantness.

I would associate myself with both the earlier symposiasts in rejecting self-realization as an expression of the nature of moral action. The moral attitude involves so predominantly, though not exclusively, a regard to the rights of other people, or, where their rights are not in question, to their welfare, that it is hard to see how anyone could have thought its peculiar character could be expressed by reference to *self-realization*. Every moral action is an act of self-realization in that it brings to fruition a power or tendency existing in the agent. But so is every non-moral or immoral action. The only kind of moral

action which can with special appropriateness be called an act of self-realization is the special set of moral actions our reason for doing which is that in doing them we secure an improvement in our own character or intellect. There is a duty of self-improvement in both these respects, but that is only one among many duties, and one which, as Prof. Stocks observes, may sometimes have to be sacrificed to more pressing duties.

There is quite a different way in which the conception of end may be used in ethical discussion. When the Shorter Catechism says that "man's" chief end is to glorify God and to enjoy Him for ever," what is meant is not that this is the end we set before ourselves in our best acts, nor even that it is that which we ought to set before ourselves, but that it is the end for which we have been created, and made such beings as we are. Such a notion of "end" underlies Butler's conception of the harmony of human nature as pointing to and devised for a certain purpose. And it is implied, though with a less distinctly theistic reference, in Plato's and Aristotle's identification of man's end with his "work," the function or system of functions for which his nature qualifies him and to which it calls him. But this is not the meaning which the phrase "a moral end" most naturally bears, and its discussion would take us into a field far remote from that of the preceding papers.

SYMPOSIUM: MATERIALISM IN THE LIGHT OF MODERN SCIENTIFIC THOUGHT.

By PROFESSOR L. J. RUSSELL, MISS L. S. STEBBING AND
PROFESSOR A. E. HEATH.

I. *By* L. J. RUSSELL.

(i.)

ACCORDING to the old materialism the ultimate reals were discrete particles of matter, which moved freely through a space indifferent to their presence or their motion. These particles were themselves unaffected by their motions; they had properties which belonged to them throughout all time, and which were capable of existing at any instant of time, however short. No occurrences really took place in the spatial universe except movements and impacts of these reals. Empedocles and Anaxagoras put the principle on which materialism is based in its simplest form when they said that what we call coming into being and passing away is really a mingling and a separating of things which simply are; while Kant expresses its rational basis when he notes that change is unintelligible from mere conceptions, but requires the intuition of a movement across space.

This view was thus based on a separation of the changing from the permanent. In consequence of the acceptance of

the separation between space and time, the permanent became related to space, the changing to time ; the real was thus given only qualities either directly spatial, or directly related to space. There resulted a separation of primary from secondary qualities, and of the material from the mental.

But as a general account of the real, claiming theoretical completeness, this view had to deny the reality of secondary qualities and of the mental altogether. Hence many who accepted the view so far as it concerned matter, refused to extend it to the whole of reality ; thus a new kind of stuff-substance was introduced, viz., mind, into which were swept all the occurrences other than mere changes of position of the material reals. But if materialism was inadequate, its patched-up dualistic offspring was no less so, the offspring having inherited all the weaknesses of its parent, with many new ones of its own. The difficulties are an old story ; they concern the factual relations between the entities separated by the theory ; between mind and matter, secondary and primary qualities, time and space, and, in the end, between material particles and space.

The last two are most important for our discussion. On the whole, the view that space was theoretically distinct from matter prevailed over the view that matter and extension were identical. Space was empty, except for the material particles moving in it. The material particles might or might not fill the whole of space ; and it was more convenient not to envisage these alternatives too closely, for either by itself brought difficulties. The youthful Leibnitz thought it was best to regard space as being " filled as much as was necessary " by a subtle matter, which interacted with less subtle material particles ; and in practice this way of considering the situation smoothed out the worst obstacles. But, even then, it was difficult to reconcile the fundamental principles of motion with the description of matter. Why should a permanently unchanging body move in one way

rather than another through a space indifferent to it, or why, when it impinged on another equally permanent unchanging body, should anything occur rather than something else? By their definition, the reals were unable to account for anything. Nothing could happen to them; they were permanently unchanging; all changes affected only their relations to other reals. And these reals were nothing to them. In short, all explanation stopped at the outer boundaries of the reals. Material particles were the only dark places in the universe.

Explanation concentrated on the complex groups formed by the minglings and separatings of the reals; and it was found necessary to attribute to the reals certain differences of mass, shape, size and (provisionally) certain other properties of gravitation, magnetism, chemical affinity, and so on, not all to be regarded as theoretically ultimate, but not actually accounted for on the original basis. And the general trend of investigation was such as to put more and more of the responsibility for changes on to a subtle matter (the ether) in which the material particles were regarded as being suspended; in the end leaving it possible that "matter" was simply a gross manifestation of a state of the ether.

But this meant one of two things. Either the new "ether" consisted merely of the old hard unchanging particles with the difficulties conveniently forgotten, or it involved an entirely new conception of "stuff." If a new conception of "stuff" was possible, it was inevitable that it should ultimately supplant the old conception of unchanging material particles, which explained nothing. And the interest of the nineteenth century in the nature of the "ether" can be looked on as due to an attempt to arrive at such a new conception of "stuff," and to use it as a basis of interpretation; the discoveries concerning electro-magnetism, radio-activity, atoms and spectra all helping to break down the old conception.

But so long as space is separated from time it is difficult to make any radical break with the old conception of stuff. For if space is separated from time, the world can and must be conceived as having a state at a given instant ; and how can the states of the world at different instants be distinguished save by the presence of some stuff distinct from space ? But this stuff, which exists in space at a given moment, must, it seems, be made up of ultimate constituents which are themselves the final material entities. And if any ultimate constituent of this stuff has any characters at a given moment which it does not derive entirely from its spatial relations at the moment, it seems as if these characters must simply belong to it, must be its characters ; and, if so, how can these characters ever change ? The only alternatives to this line of argument, so long as space is separated from time, are, firstly, to regard space itself as capable of changing in time, or, secondly, to deny that the stuff in space is made up of ultimate constituents. But both these alternatives seem more obscure than the previous line of argument, and are not willingly accepted so long as the previous line of argument remains possible.

It is, in other words, difficult to avoid ultimate unchanging material particles of stuff in physical science, so long as space is separated from time ; for if you separate space from time it is difficult to avoid separating space from matter, and matter from time.

(ii.)

What are we to mean by “ not separating space from time ” ? How are we to avoid separating them—supposing it is wrong to separate them ?

The reply to this must be, “ By not following a theory that involves their separation.” In other words, if we are to avoid the separation we must hold closely to events as experienced, in the hope of viewing them without such a theory.

It is perhaps best to begin with the relation between space and matter and work backwards. To avoid separating space and matter it is necessary to avoid separating space from the set of occurrences that we refer to material things. The denial, taken seriously, of absolute space, should help us here. For if we see that positions of entities, and distances between entities, can be expressed in terms of the entities themselves, we can see that the notion of an absolute existing space, in which entities that are not purely spatial can be situated and through which they can move without affecting space itself, is unnecessary. It is possible to think of a space constructed of purely spatial points, between which are purely spatial distances, and for the definition of this space there is no need to refer to material bodies. Again, it is possible to think of a spatially extended material system, in which positions are marked by material points, and distances are marked by material rods. The consideration of the pure space will assist you in the consideration of the spatial properties of the material system. But no use whatever can be made of the notion of the material system as being situated in the pure space.

Let us see where we are. On the one hand, a world completely empty of matter can be imagined and treated by the mathematician. On the other hand, a world completely full of matter would not involve the supposition that besides the matter there is a continuous space in which the matter is placed. So much perhaps we may admit without too great hesitation. But our world seems to present us with a system which contains material bodies separated by tracts of space which cannot be observed to contain any material bodies; and it is this which encourages the separation of pure space from material systems. What are we to do in this case?

It seems clear that if we are to avoid this separation we must consider the material bodies and the apparently empty space

between them as belonging to one single system. Where there is a material body we must not suppose that there is a uniform space plus some stuff ; and when a body moves relatively to other bodies we must not suppose that it moves through a space distinct from itself, which it fills for a time and then leaves empty. We must suppose, to put it in other words, that when the intervals between a material body and other material bodies alter, there is some significance in our interpreting this as meaning that the apparently empty spaces have altered their configuration as well.

But how, then, you may ask, are we to picture such a system, or conceive it as a whole ? The reply is that it is perhaps better at first to refrain from conceiving it as a whole, and to be content with the only things we can use in our theoretical calculations, viz., changes in the intervals between bodies. The determination of the properties of intervals in such a system is the business of the physicist, aided by the studies of the pure mathematician concerning the generalized conception of interval. But the layman need not despair of getting *some* view of the situation.

How then am I, as a layman in physics, to make a beginning ? Being a layman, I am extremely likely to make the attempt on wrong lines ; and I should prefer to do it in private, and should assuredly be doing it in private were it not for an unguarded promise to open a discussion at this conference.

How, then, am I to set about it ? I may, *e.g.*, as an exercise of imagination, picture a quivering mass of jelly with holes in it like a sponge. I may think of the holes as changing shape and position relative to any points on the jelly that may be taken as reference points. I must suppose that the problem of determining the shape of a hole is one to be solved not by putting a measuring rod across the hole at various points, but to be solved entirely by means of elaborate assumptions aided by calculations from measurements made within the quivering

jelly, with quivering measuring rods. I must try to realize that the effect of putting a measuring rod across a hole is to destroy the hole, not to measure it. I must refrain from placing the jelly as a whole in any empty space. It will be wise for me to refrain from considering my quivering jelly as giving a picture of the actual world, and, indeed, as anything more than an exercise of the imagination in the effort to get rid of the separation of space and matter.

Shall I be any nearer to the view which refuses to separate matter and space? At any rate, something of this sort seems to be needed. But I shall not yet be finished. I have still to consider time. Here, again, I have to avoid following a wrong theory. I can see that the basic experiences might reasonably be taken to be those of (*a*) simultaneity of two events separated by a small interval, and (*b*) before and after in relation to events separated by a small interval. In the case of (*a*) the interval may be theoretically treated as a space interval; in the case of (*b*) the interval is something more complex. In both cases the conceptions relating to the experiences can be made precise only by a doctrine of limits; but this need not trouble us here. For us the essential point is that, where the interval between two events is not small, the conception of an interval, and the derived conceptions of space-distance and of time-interval are complex, and a matter of the theoretical interpretation of experience. In particular, the notion of simultaneity of two events separated by a large space-distance is a complex one, to be determined by reference to the experiences of the physicist and by such additional theoretical considerations as may be needed for dealing with these experiences. For us the important result emerges from the considerations of the physicist that the conception of a single time sweeping onward, in which events take place, turns out to be a conception which is inadequate to the experience. Our task as laymen, then, will be to recognize

this, and to refrain from assuming it as self-evident. All this may help us to hold more closely to what we actually experience, and to refrain from importing into what we actually experience assumptions which the progress of science shows to be unworkable. It may help us to accept a view which merges geometry, chronometry and theoretical physics, so far as these deal with the actual world, into one science. We shall the more readily accept this if we see that here science is simply giving confirmation to the doubts felt by philosophy in the past as to the possibility of a separation between space, time and matter, however difficult we may find it to get a concrete picture of the situation.

(iii.)

We can now sum up the results so far reached.

On the old conception of matter, (*a*) matter had its properties in independence of its particular position in space and of its movement through space ; (*b*) at the same time the fundamental properties of matter were determined in terms of space, while the fundamental interrelations between various particles of matter were determined in terms of movement.

The modern experimental evidence shows that the spatial properties of a body cannot be determined independently of its movement : thus we are compelled to give up either (*a*) or (*b*).

This makes it impossible to hold to the old basic materialistic conception of a persisting stuff with spatial properties moving unchanged through space. If we are to hold to the notion of a matter having its properties independent of its movement through space, these properties must not be defined in terms relating to space. And it seems preferable to follow the lead of physics, and to include the properties of space, time and matter in a single system---in other words, to give up the conception of a persisting unchanging matter or stuff altogether. I shall speak of this conception, which is here rejected, as the conception

of stuff-substance. And I can sum up what I am arguing in a single sentence : Stuff-substance, that which moves in space and retains spatial properties unchanged in its motion, does not exist.

(iv.)

What, then, will be the main elements in our conception of matter ?

(a) It is clear, in the first place, that we must think of everything material as in flux : in the sense that within any spatio-temporal interval, however small, there will be in principle some change, *i.e.*, if we find no change in a particular interval, we shall regard this as a particular case of the principle of universal change.

(b) But, in the second place, we need something determinate ; a universal flux which resulted in the completely indeterminate would not give us a satisfactory conception. Determinateness and flow thus seem to be the two correlative aspects of the conception we require. We may perhaps arrive at a synthesis of these aspects by considering what is meant by a "song," or a "speech," or a "ceremony," all of which we regard as determinate, identifiable, capable of being repeated, and yet as involving a stretch of time in which to exist. The "song" as it is sung does not exist "at" any determinate moment of time ; from the point of view of a moment of time the song cannot exist completely until the last note is sung, and then it has ceased to exist altogether. We must think of the "determinate" in the flux in some such way as we think of the "song." It must contain variety within it. An existence shrunk down to a knife-edge of time would have no character. What time does not light up is dark. The singing of the song is, from one point of view, a series of events, a flow ; but the song itself (which only exists because of the singing) must be regarded as existing in a sense which allows it to exist "as a whole" (which, it is clear, must no longer mean "all at once"),

while containing duration within it ; and again allows it to exist elsewhere and on another occasion, with an entirely different flow within its duration. The old atom was a song which could be sung all in a knife-edge of time, and which could be eternally the same singing, as well as the same song.

(c) But, in the third place, it looks as if such determinateness must be able to be found anywhere within the flow where we care to look for it. A pure flux, without any determinateness, seems meaningless, on however small a scale we may take it. And hence it seems as if our "determinate" must be regarded as containing within it a number of determinates, just as a "song" can be regarded as made up of verses, and, again, of musical phrases, or of notes, or of vibrations.

(d) This view of a "determinate object" seems to involve that the identity of an object is formal rather than material, turning on something analogous to the mode of grouping or arrangement of its constituent objects. We might perhaps illustrate it by reference to Spinoza's account of a finite individual, as a special mode of spatio-temporal grouping A of constituent finite individuals b_1, b_2, b_3 , etc., of such a sort that the mode of grouping is more important than the particular individuals b_1, b_2, b_3 , etc., within it ; and go on to conceive any b as a special mode of spatio-temporal grouping B of finite individuals c_1, c_2, c_3 , etc., defined in the same way. Proceeding in this way, we should in the end never arrive at a set of individuals z_1, z_2, z_3, \dots which were not made up of lesser individuals. We should always, in theory, be able to carry the analysis a stage further. The conception of a plastic matter, of a mere flow, would represent the limit of such a series.

(e) But a pure spatio-temporal grouping of pure spatio-temporal groupings, *ad indefinitum*, seems too abstract ; we need some conception, such as that of quality, to be used with the proviso that our "qualities" must not be regarded as

instantaneous, and also with the proviso that we need not suppose that the qualities perceivable by the senses possessed by human beings exhaust the range of the conception. An electron, regarded as a determinate entity, must be allowed to have qualities in the same way as (to take any example) a snail's shell or a spiral nebula has.

(f) If we hold fast to the conclusion that any portion of spatio-temporal existence must be capable of being regarded as determinate as well as being in flux, we can admit the possibility of a qualitative distinction between any determinate object and its constituents. Thus we must admit the possibility that as we take our survey over a wider or a narrower stretch of space-time we meet with different qualities.

(g) We have to note, as a further complication, that the conception of "quality" (as modern discussion has amply made out) is bound up with that of "appearance," and involves a situation at which appearances appear, varying situations from which appearances appear at the aforesaid situation, and sets of conditions under which these appearances appear. But the situations, and the conditions, all themselves have to be described in terms of determinate objects. Thus the notion of a determinate object involves reference not merely to the determinate objects which form constituent parts of it, but also to a wider field of determinate objects of which it itself forms a constituent.

(v.)

The above considerations merely illustrate in a preliminary way the new form the problem of matter takes. They are not, it is clear, free from difficulties. We shall consider this point later. Meanwhile it is to be noted that while the old materialism is excluded, a new form of materialism is possible, which contents itself with part of what the old asserted. For the transition

from the point of view of ordinary life to that of science can be regarded as a simple transition from a macroscopic view of the determinate flux to a microscopic view of the same flux. From the point of view of ordinary life, the world presents itself as an aggregate of things of various sorts, enduring and changing, in spatio-temporal relations with one another, with various qualities of colour and smell and sound, etc., and with various powers of affecting other things. The scientist digs further into this world, analyses its objects into constituents such as electrons, atoms, molecules, fields of force, etc., and by this analysis he is enabled to understand better the changes in the qualities of the objects of the ordinary world. The new materialism, like the old, asserts that these constituents are more ultimate than the objects of the ordinary world: that the objects of the ordinary world are mere results of the complex groupings of these constituents. It does not need to assert that the most elementary objects (*e.g.*, electrons) at which it arrives are ultimate in the strict sense. It is sufficient that electrons should be sufficiently stable objects (in the new sense) for the purposes of science. Nor does it need to show that the properties of the complex objects of the ordinary world can be "deduced" from the properties of the constituents which science finds. It is enough if the scientist can correlate variations in the properties of the complex objects with variations in the spatio-temporal relations of their constituents. The new materialism, in other words, need not assert anything about the strictly ultimate constituents of things. It is sufficient for it to assert that all the sciences in the end reduce to physics.

Whether the present state of knowledge bears this out or not is a question which seems to me to fall beyond the scope of this symposium. A few remarks, however, may be permitted.

As a consequence of the rejection of "stuff-substance," we are compelled to seek a more formal basis for our definition of an

object or a substance. This seems to involve the result that no help against the new materialism is to be gained by introducing any new quasi-“stuff-substances,” such as “life” or “mind” or “social or group mind,” as we proceed from one kind of object to another. The battle will have to be fought on the question of qualities or properties or functions; to deny mind as a kind of stuff is not to deny mind as a substance. But if all modifications of the behaviour of a “minding-organism” could be correlated completely with variations in the groupings of molecules and atoms, changing according to the laws of physics, then “minding-organisms” would turn out to be simply complexes of simpler objects. If, on the other hand, it turns out to be impossible to correlate all variations in the behaviour of “minding-organisms” with variations in the spatio-temporal groupings of their constituents, then we shall be justified in describing “minding-organisms” as new substances, in spite of the fact that they present us with no new stuff, but can be completely analysed into physico-chemical constituents. In a similar way, if it turned out to be impossible to correlate all variations in the behaviour of groups of persons with variations not merely in their spatio-temporal grouping, but in those relations between the individuals in the group that were regarded as specifically mental, then we should be justified in describing the group as a new substance, in spite of the fact that it presented us with no new stuff. The difficulty in this case is clear: it is the difficulty of studying minds apart from groups, so as to determine what characteristics of the behaviour of groups of persons are to be regarded as belonging to minds, and what as belonging to groups. A precisely similar difficulty appears to be involved in the passage from electrons to atoms, from atoms to molecules, and so on; but it is avoided by the conception of spatio-temporal grouping, which applies equally to molecules, atoms and electrons.

(vi.)

It is clear that in all this we are not arriving at solid ground that philosophy can rest on. This mysterious "flow of events," with its still more mysterious "objects" of various types related in a mysterious way to the "flow of events"—is not all this entirely incomplete, hanging in clouds of mystery? Are objects like boats, floating in the sea of events, tossed hither and thither, or have they rudders and sails and steersmen to guide themselves; or are they simply the chance patterns that the flow of events forms one moment, to be dissolved or reformed the next, which have been conceptualized by the inquiring mind? If they are such mere chance results of the flow of events, it is not they, but the flow that we desire to study; but if they are the moving agents, it may be said, is not your account of their relations to each other and to the flow of events altogether impossible? And, again, what of appearances, which are said to have the faculty of being "here, from there, under such and such conditions"? Are they in that place, at which they appear, or in this place, from which they appear? And to whom do they appear? Do they appear when no one is perceiving them, or do you mean only that they would appear if someone were there to perceive them? If no one is there, is nothing there appertaining to the object? Are you not, in short, in all this trying to retain a realism which, in the end, you will find transformed into a thoroughgoing idealism at the slightest touch? Is it not impossible to understand what you describe, except as elements in and for a consciousness?

I have endeavoured in this paper to steer clear of these questions, and to concentrate on the humbler task of trying to describe the situation which results when the old materialistic conception of substance has been set aside. It is difficult enough to see the tangle as a whole, before trying to take the next step; and the preliminary analysis of the situation does not involve the wider issues.

II. *By* L. S. STEBBING.

(i.)

IN the opening paper of this symposium Professor Russell has briefly indicated the grounds on which the old materialism, based upon the traditional notion of substance, has been superseded by a new materialism which recognizes that nothing is permanent, nothing persists unchanged. That "scientific materialism"—to adopt Professor Whitehead's name for the doctrine associated with Newtonian physics—is incompatible with the recent developments of science will hardly, I think, be disputed. But what exactly this incompatibility involves and what is its philosophical outcome it is more difficult to decide. Professor Russell at the end of his paper raises the question whether the philosophy of nature to which we seem to be led will not in the end involve us in a "thoroughgoing idealism." It is the implications of this question that I propose to discuss as my contribution to this symposium.

The terms materialism and idealism are excessively vague and have consequently been much used by philosophers and their critics. As names to describe, for instance, the philosophies of Hobbes and of Leibniz respectively, they have little to do with science. Belief in these philosophies is rendered neither easier nor more difficult by any advances in science. Perhaps the most convenient sense in which the term "idealism" can be significantly used is indicated by Professor Kemp Smith, who says:—"The meanings attached to the term 'idealism' are so numerous and so conflicting that I have found it convenient to use it in a very wide sense, as covering all those philosophies which agree in maintaining that spiritual values have a determining voice in

the ordering of the Universe.”* But the opposite of such theories is not “materialism” but naturalism. Consequently, the philosophical reasons for, or against, either type of theory are not likely to be affected by changes in the scientific conception of “matter.”

The main respects in which the philosophy of scientific materialism appears inconsistent with modern scientific thought seem to me to be three, viz.: (1) The conception of “stuff”; (2) the exclusion of the secondary qualities from nature; (3) the conception of laws. Professor Russell has dealt with the change in the scientific conception of matter which has necessitated the repudiation of “stuff” in the form of material substance, and I shall not pursue that topic further.

The second point raises some questions of importance, and I propose to deal with it in connexion with Professor Whitehead’s rejection of bifurcation theories. There can be no doubt that his recent philosophical writings have not only been regarded as contributing to the overthrow of scientific materialism, but have further been widely interpreted as involving an idealistic metaphysic. It is by no means clear that such an interpretation would be unwelcome to Professor Whitehead himself. However that may be, his language has given rise to serious misconceptions. It is at least possible that some of these misconceptions are due to the fact that Whitehead himself is not clear as to the ultimate issues. Two quite different problems seem to me to be confused in Professor Whitehead’s philosophy of nature, viz., the problem of value and the problem of the secondary qualities. In *The Concept of Nature* this confusion was not explicit. It appears clearly in *Science and the Modern World* in the way in which he treats the appeal to the experience of the poet. I am myself in complete agreement with Whitehead’s insistence that colours, sounds, scents, etc., must be included in nature and that their

* *Prolegomena to an Idealist Theory of Knowledge*, p. i.

extrusion leads to a vicious bifurcation. But in his later expositions of this doctrine Professor Whitehead seems to me quite unwarrantably to stress the notion of *value*, vaguely conceived, and suggesting even the reintroduction of *purpose* into the scientific scheme. Thus, in speaking of scientific materialism as "the fixed scientific cosmology which presupposes the ultimate fact of an irreducible brute matter, or material, spread throughout space in the flux of configurations," he writes: "In itself such a material is senseless, valueless, purposeless."* Again, in the last chapter of the same book, speaking of the reactions of science upon the "climate" of civilized society, he says: "Its materialistic basis has directed attention to *things* as opposed to *values*."† Thereupon he proceeds first to connect this mode of thought with the industrial system of the nineteenth century; secondly, to suggest somewhat vaguely that the repudiation of scientific materialism tends in the direction of the gospel of mutual service. These vague suggestions, difficult to disentangle from his more fruitful conceptions, undoubtedly encourage the belief that somehow modern science is more in accord with our cherished beliefs than was the cosmology of scientific materialism. Is there any sense in which this can be said to be the case? The answer to this question does not, in my opinion, depend in any way upon the problem of the secondary qualities. I shall, therefore, discuss this latter problem first, and then deal with the third point mentioned above, viz., the conception of laws, which does seem to me to have some bearing upon the answer to be given to our question.

(ii.)

The concluding section of Professor Russell's paper, to which I have already referred, is intended, I think, to suggest the

* *Science and the Modern World*, p. 24.

† *Science and the Modern World*, p. 284. *Italics in the original.*

problem whether the inclusion of sense-objects in nature is compatible with the closure of nature to mind. In attempting to deal with this problem it is important to keep distinct the two questions which, I have suggested, Professor Whitehead confuses, viz., the inclusion of value, and the inclusion of colours, sounds, and the other secondary qualities. Professor Whitehead's later treatment of his theory may justify the estimate as to its ultimate importance that was reached by a reviewer of *Science and the Modern World*, who sums it up as follows: "Perhaps its most important effect is to get rid of the idea of an inert valueless matter independent of mind."* Clearly the important word here is "valueless," and Professor Whitehead is, as we have seen, himself responsible for its introduction. What is "valueless" may well be not independent of mind. But considerations of value have nothing to do with the theory of the sense-object as a term in a multiple relation, nor with the consequent rejection of simple location. Professor Whitehead has made not the slightest attempt to reconcile his metaphysic of value with his former theory that "nature is closed to mind." But it is this theory alone that is scientifically based and which will concern us in this section. Does, then, this theory of the multiple ingression of sense-objects entail the dependence of these objects upon mind? Does it justify an idealistic interpretation of modern science? The difficulty I find in discussing this question is the lack of positive arguments in support of an affirmative answer. Professor Russell says that he is not here concerned to answer the question that he raises. My difficulty is to see why they should be raised.

Certainly the assertion that the red patch I see is *as* I see it and is "there from here" does entail that the red patch would not *be* apart from—i.e., in complete independence of—the bodily sense-organs. But this is not to say that any term in the relation

* Herbert Read, in *The New Criterion*, May, 1926.

is either mind or mind-dependent. The working out of the theory is complicated because the facts that have to be taken into account, viz., all that is observed, are complicated. The simplicity of theories based upon the distinction between primary and secondary qualities has certainly gone. But the simplicity of these theories was gained by the hypostatisation of abstractions which no modern theory of sense-perception could accept. It seems clear that we must reject the traditional dualism between the mental, taken as including the secondary qualities, and the physical, taken as excluding them. As Professor Whitehead put it: "The real question is: When red is found in nature, what else is found there also?"* How is it supposed that the resort to mind would help us in the solution of this problem? It seems to me that those who think it would are being half-hearted in their rejection of bifurcation theories and are not prepared to carry through the fundamental revision of the traditional conceptions that such a rejection should entail. They are too much influenced by the traditional notion of physical objects as determined by considerations of touch, and are thus led to raise difficulties due to a conception which, in comparative ignorance of the transmissive side of nature, grew out of this common-sense notion of a physical thing. But it was just the inadequacy of the traditional concepts to deal with what is in fact observed that led to bifurcation, with its result, the resort to mind. The acceptance of more adequate concepts and the consequent recognition of multiple relations in nature frees us from both difficulties at once.

To Professor Russell's question, therefore, I can only reply: Why on earth *should* we be led to a "thoroughgoing idealism?" Perhaps he does not think we should be. Nevertheless, he thinks the question worth asking.

* *The Concept of Nature*, p. 41.

I do not wish to deny that from the first there have been indications in Professor Whitehead's philosophy that his dictum, "Nature is closed to mind," was merely a methodological principle.* But I should contend that Whitehead's inconsistencies on this point are due to his conception of passage and have nothing whatever to do either with his theory of sense-objects or with his analysis of matter as an abstraction of a high degree of abstractness. Is there anything in this latter conception that justifies an idealistic interpretation of Professor Whitehead's philosophy of nature? A distinguished philosopher, Professor Hoernlé, has so interpreted it. He speaks of Whitehead's "attack on 'matter'" and claims him as a foremost supporter of the "revolt against 'matter,'" which, according to Professor Hoernlé, is the most significant characteristic of modern science. The word "revolt" suggests the attitude which Professor Hoernlé adopts with regard to the problem and which finds expression in such a statement as the following: "The suspicion that science is committed to 'materialism' arouses misgiving, if not hostility, in many quarters and tends to bring undeserved discredit upon science."† He is concerned to refute the charge and to save the credit of science. In this project he is glad to enlist Professor Whitehead as an ally. But in what exactly does the "revolt against 'matter'" consist? Professor Hoernlé points out that "in this whole situation there is much confusion of thought, resulting from the failure to distinguish the different senses of 'matter.' We are all far too apt to take it for granted that we know what the term 'matter' means." After distinguishing four different senses in which the term "matter" is constantly

* I have dealt with this question in an article in *Mind*, July, 1924, and shall not pursue it here as it is not relevant to the present topic. Doubtless, however, Professor Whitehead's treatment of this problem has done much to lend support to the interpretation I am concerned to reject.

† *Matter, Life, Mind, God*, p. 49.

used, Professor Hoernlé argues that the fourth sense, viz., "the imperceptible cause of our sensations," is now definitely abandoned and with it the older materialism which was to a considerable extent based upon this conception. This is true. But what justification is there for describing this revision of fundamental concepts as a "revolt" against "(matter)" or for suggesting that it should dispel the "suspicion that science is committed to 'materialism' "?

The "dematerialisation of matter," as it has been called, does not aid the "revolt" against materialism in any sense in which materialism can "bring discredit to science" or "arouse misgivings." It is not the alleged fact that there is an imperceptible and unknowable cause of our sensations that is at the root of such misgivings. Rather it is the claim of the scientist to bring all our "sensations" within the scope of scientific laws that constitutes the main objection to such theories. The point that is important for the opponent of materialism is the conception of laws rather than the conception of matter. Doubtless the change in the latter concept has bearing upon the former. But its significance consists rather in a change of attitude on the part of the scientist than in any given analysis of the nature of matter. It is, therefore, the third of the three points I referred to above in which modern science seems to be incompatible with "scientific materialism" that is of central importance for our discussion.

(iii.)

There can be little doubt that scientific materialism was excessively anthropomorphic and the man in whose form the universe was constructed was the physicist *qua* physicist. His success in his chosen field of research led him to dogmatize beyond the confines of his science and to feel certain that he knew the characters of everything in the universe. Consequently, he felt completely satisfied that, working from a few ultimate concepts,

he would be able either to deduce, or to reduce to shadows that could be ignored, not only all that we perceive, but also all that we feel and desire, or that could be felt and desired. The prevailing fashion extended in the nineteenth century from physics to the science of society. Thus Huxley, the brilliant popularizer of other men's discoveries, wrote confidently : " Anyone who is acquainted with the history of science will admit that its progress has, in all ages, meant, and now, more than ever, means, the extension of the province of what we call matter and causation, and the concomitant gradual banishment from all regions of human thought of what we call spirit and spontaneity. . . . And as surely as every future grows out of past and present, so will the physiology of the future gradually extend the realm of matter and law until it is coextensive with knowledge, with feeling, and with action." He points out that " the consciousness of this great truth weighs like a nightmare upon many of the best minds of these days. . . . The advancing tide of matter threatens to drown their souls ; the tightening grasp of law impedes their freedom ; they are alarmed lest man's moral nature be debased by the increase of his wisdom."* There is despite the difference of language and the reversal in the method of approach, a surprising kinship between this statement and that of Professor Hoernlé's quoted above.

I am not here concerned with Huxley's attempt to dispel the nightmare, which would not, I think, commend itself to-day to any philosopher. Rather I am concerned to indicate the sources of the nightmare in a cocksure dogmatism that not only felt confident that it knew exactly what " matter " was, but also conceived of a huge impersonal Law controlling everything, even the desires of those who were depressed at its omnipotence. Hence, the prevalence of the term the " reign of law " to indicate the scientific outlook of the nineteenth century. It is this

* *Lay Sermons*, 1870, p. 156.

conception rather than the billiard-ball view of matter that is the basis of that scientific materialism which, to so many men of Huxley's generation, appeared—in their non-professional moments—as a nightmare.

We must consider, therefore, in what way the scientific conception of law has changed. So much has lately been written on this subject that it is not necessary to say much here. All that I wish to do is to point out the bearing of this conception upon the philosophy of nature.

The Newtonian cosmology affords the best example of the reign of law. In the system of Laplace it reached its most perfect formulation. It is true that Newton himself wrote: "This most beautiful system of the sun, planets and comets, could only proceed from the counsel and dominion of an intelligent and powerful Being." This statement, with much more to the same effect, occurs in a discussion of the theory of vortices in the General Scholium at the end of Book III of the *Mathematical Principles of Natural Philosophy*. But to-day such a statement would be felt to be out of place in a serious work on astronomical physics. Moreover, the belief in God was no part of the evidence upon which Newton based his "experimental" researches. Those researches, whether Newton desired it or not, made possible the ideal of scientific determinism. Theistic scientists who have accepted the Newtonian mechanical system have usually followed the precedent, already established by Boyle,† of appealing to the "concourse of God" to keep the system going. Laplace showed clearly that no such concourse is necessary. The recognition of this fact played an important part in the scientific

† See *The Works of the Honourable Robert Boyle*, 1744, Vol. III, p. 450. "The laws of motion being settled, and all upheld by his [God's] incessant concourse and general providence, the phenomena of the world thus constituted are physically produced by the mechanical affections of the parts of matter, and what they operate upon one another according to mechanical laws." Cf. also (III, p. 516.)

outlook of the nineteenth century. To-day the situation is changed wholly as the result of the advance of science itself.

The geometrising of physics has revealed how abstract is that knowledge of the external world which we call physical science. On this point all recent writers on the philosophy of science are agreed. Evidence of the correctness of this statement can be found in the writings of Professor Weyl, Professor Eddington and Mr. Bertrand Russell, as well as in those of Professor Whitehead. They are too well known for it to be necessary for me to quote at length from them now. Two quotations will suffice.

Professor Eddington says :—

“ Leaving out all æsthetic, ethical, or spiritual aspects of our environment, we are faced with qualities such as massiveness, substantiality, extension, duration, which are supposed to belong to the domain of physics. In a sense they do belong, but physics is not in a position to handle them directly. The essence of their nature is inscrutable; we may use mental pictures to aid the calculation, but no image in the mind can be a replica of that which is not in the mind. And so in actual procedure physics studies not these inscrutable qualities, but pointer-readings which we can observe. The readings, it is true, reflect the fluctuations of the world-qualities; but our exact knowledge is of the readings, not of the qualities. The former have as much resemblance to the latter as a telephone number has to a subscriber. . . .

“ Until recently physicists took it for granted that they had knowledge of the entities dealt with, which was of a more intimate character; and the difficulties which many find even now in accepting the theory of relativity arises from an unwillingness to give up these intuitions or traditions as to the intrinsic nature of space, time, matter and force,

and substitute for them a knowledge expressible in terms of the reading of measuring instruments.”*

Mr. Bertrand Russell writes :—

“The essence of matter appears to be this: We can distinguish series of events in space-time which have a certain kind of close resemblance to each other, such that common sense regards them as manifestations of one ‘thing.’ But when we look closely at the question, it turns out that what physics offers is something more abstract than this. Take, *e.g.*, the continued existence of a certain electron. This means to say that events in a certain neighbourhood will be such, as can be calculated on the assumption that there is an electric charge of a certain standard magnitude in the middle of that neighbourhood; and that the neighbourhoods of which this is true form a tube in space-time.

“So long as we stick to the standpoint of pure physics there is a certain air of taking in each other’s washing about the whole business. Events in empty space are only known as regards their abstract mathematical characteristics; matter is only an abstract mathematical characteristic of events in empty space.”

Again :—

“What Dr. Whitehead calls the ‘pushiness’ of matter disappears altogether on this view. ‘Matter’ is a convenient formula for describing what happens where it isn’t. I am talking physics, not metaphysics; when we come to metaphysics, we may be able, tentatively, to add something to this statement, but science alone can hardly add to it.”†
With regard to the bearing of this changed conception of the

* *The Domain of Physical Science in Science, Religion and Reality*, p. 199.

† *Outline of Philosophy*, pp. 152–153; 165. Cf. *A, B, C of Relativity*, pp. 226–229, and *Analysis of Matter*, Ch. XIV.

nature of scientific knowledge upon the problem of materialism these writers are, however, not in complete agreement. Mr. Bertrand Russell thinks that "materialism as a philosophy becomes hardly tenable in view of this evaporation of matter. But," he adds, "those who would formerly have been materialists can still adopt a philosophy which comes to much the same thing in many respects." Professor Eddington is rather concerned to point out that: "In considering the relations between science and religion it is a very relevant fact that physics is now in course of abandoning all claim to a type of knowledge which it formerly asserted without hesitation. . . . The difficulty does not lie in recognising a wider spiritual reality from which the physical world is a specialized selection. The difficulty is to explain why the physical world, picked out from a more comprehensive world by the criterion of measurability, should be found to constitute a self-contained system; it operates with so little interference from the rest of reality that we often forget that it is only a part."

If I understand their attitude aright, both Mr. Russell and Professor Eddington are in agreement that the abstract knowledge of physics stands in need of interpretation. It is in their respective interpretations that their divergence becomes irreconcilable, the one tending to an interpretation that is essentially materialistic, the other to an interpretation that is clearly idealistic. In what exactly does the contrast consist? We have just seen that Mr. Russell considers that materialism as a philosophy is not now tenable. But what is essential to materialism is, as Professor L. J. Russell has pointed out above, that "all the sciences in the end reduce to physics."* This seems to me to be equivalent to the statement that old-fashioned materialism is to be replaced by scientific determinism. Hence the central importance of the conception of law. But it is not at all easy to make out what exactly is meant by scientific determinism. As a recent writer,

* See *supra*, p. 110.

Professor Bridgman, puts it : "Determinism to the physicist is simply a way of stating certain implications of his conviction of the connectivity of nature."* Professor Bridgman, having stated that, "by determinism we understand the belief that the future of the whole universe, or an isolated part of it, is determined in terms of a complete description of its present condition," attempts to determine what we mean by "present condition," and in so doing points out that the physical operations involved in the attempt have meaning only within a "penumbra of uncertainty." He sums up the result of his inquiry in the statement : "With this enlarged understanding of what we mean by present state of the system, it seems to me that physical evidence is now rather favourable to the view that the present determines the future, subject to qualification about the penumbra, at least as far as large-scale phenomena are concerned. It appears more doubtful when we come to small-scale phenomena, and in particular it is doubtful whether the principle can be applied to the details of the quantum process, and, in fact, it is not certain that it has meaning. It is certain that if it is true an enormous amount of structure beyond any that has yet been detected is implied." Mr. Bertrand Russell would, I think, be in agreement with this statement ; nevertheless, he seems to me to make various inconsistent statements with regard to the universality of physical laws. Thus he says : "We cannot escape from the universality of physical causation," and, on the same page, he writes, "We have seen that, on the basis of physics itself, there may be limits to physical determinism."† Again, he writes : "Mind is merely a cross-section in a stream of physical causation, and there is nothing odd about its being both an effect and a cause in the physical world. Thus physical laws are those that are fundamental."‡

* *The Logic of Modern Physics*, p. 211. † *The Analysis of Matter*, p. 393.

‡ *Outline of Philosophy*, p. 156.

Professor Eddington takes a different view. Discussing the question of the "direct interference of mind and spirit with the course of events in the material world," he asks, "Is the motion of the editor's pencil to grammatically amend the split infinitive in this sentence simply the automatic response under physical laws of a complicated configuration of electrons to the external stimulus of this smear of ink on paper? Such an extravagant hypothesis might conceivably appeal to the crude materialist who supposes that the world of electrons is the fundamental reality. But we have seen that the external world of physics is in the first place approached by way of consciousness, and that it relates only to certain aspects of the common basis of material and spiritual things. The dance of electrons in the brain is only a material aspect of mental states and resolutions occurring, and there is no reason why it should claim to reveal the whole inner constitution by which one mental state leads to another."*

He does not minimise the difficulties in the way of admitting such an interference with the "statistical laws" of physics, but I have no space here to follow his discussion. What is important to note is that Eddington's view depends upon his interpretation of physical laws as gaining actuality only through mind. He sums up his position as follows: "Our thesis has been that the recent tendencies of scientific thought lead to the belief that mind is a greater instrument than was formerly recognised in prescribing

* *Op. cit.*, p. 124. Cf. *Mathematical Theory of Relativity*, § 103. "The world which we have to build up from the crude material is the world of perception, and the process of building must depend on the nature of the percipient. Many things may be built up out of $G_{\mu\nu}$, but they will only appear in the perceptual world if the percipient is interested in them. We cannot exclude the consideration of what kind of things are likely to appeal to the percipient. The building process of the mathematical theory must keep step with that process by which the mind of the percipient endows with vivid qualities certain selected structural properties of the world." Cf. also *Space, Time, Gravitation*, p. 201.

the nature and laws of the external world as studied in physical science ; that in exploring his own territory the physicist comes up against the influence of that wider reality which he cannot altogether shut out ; and that by its selection of values the mind may indeed be said to have created its physical environment.”*

Professor Eddington’s idealistic interpretation seems to me to depend, therefore, upon two main considerations. First, the conventionality of laws ; second, the necessity for introducing actuality into the cycle of definitions that constitutes theoretical physics. How does this bear upon our problem ? It seems to me that even if it be granted that physical laws are only expressible in terms of those things for which the human mind has an affinity, it does not follow that mind is not itself an element within that physical scheme, and subject to those laws. Nor does the change from “ laws of nature ” to “ conventions ” and “ principles ” necessitate any such ascription to mind of a dominating position in the universe. On the other hand, it is clear that modern physics is compatible with such a view as Eddington’s, and if he were right, mind would have a position with regard to nature much less external and unintelligible than the position ascribed to God by Boyle and Newton.† The problem, therefore, hinges upon the questions : Is nature closed to mind, or does mind itself fall within nature ? Does mind give laws to nature, or is mind itself describable wholly in terms of natural laws ? The discovery that it is no longer possible to answer these questions by a simple Yes, or No, is the main contribution made by recent scientific thought to the problem of materialism.

To sum up. Following the lead given by Professor Russell, I have confined my discussion to the bearing of modern thought

* *Loc. cit.*, p. 217.

† Such an interpretation would, I think, be idealistic in the sense defined by Professor Kemp Smith.

in the physical sciences upon the problem of materialism. Doubtless there is much of importance to be added from the point of view of biology. I am, however, completely ignorant of biology and could not pursue this topic, even if space permitted.

I have endeavoured to show that the respects in which modern science is incompatible with scientific materialism afford us no grounds for an idealistic interpretation of physics. The belief to the contrary is commonly based upon the illegitimate introduction of considerations of value into the philosophy of nature. Professor Whitehead's vague language and undeveloped hints have done much to encourage this belief. It seems to me that the dematerialisation of matter in no sense constitutes a "revolt" against matter. To reduce the electron to a complicated equation, or to a logical construction, is not to avoid the difficulties of a materialistic philosophy. Nor does it seem to me that Professor Whitehead's theory of the multiple ingression of sense objects has any bearing upon this problem. What is of central importance is the conception of law. It must be admitted that the "reign of law" is a conception much less precise and much less useful for physics than was formerly supposed. The exact nature and scope of scientific determinism is, therefore, still an open question. The recognition of this fact does constitute an important difference between the modern scientific outlook and that of the last three centuries. It is, therefore, not impossible to interpret science idealistically, but there is nothing in modern science that necessitates such an interpretation. Professor Eddington accepts one interpretation; Mr. Bertrand Russell tends to the other. Perhaps all that we can say is that Professor Eddington, mindful of spiritual values, is ready to assert the reality of man's freedom; whereas Mr. Russell, impressed with the importance of physics, would like to assert the universality of physical laws. The final decision does not lie within the consideration of science. All that can be said is that the *attitude* of

the physical scientist has changed, and so profoundly that the change may even be described as "revolutionary."* Dogmatic certainty and legal precision have given way to the cautious statement of possibilities. But where philosophical scientists hesitate, it is, in my opinion, a mistake for idealist philosophers and theologians to rush in to interpret these cautious statements and to base large hopes upon this change of attitude.

* Canon Streeter, *Reality*, p. 28.



III. *By* A. E. HEATH.

(i.)

It has been quietly taken for granted by my collaborators in this symposium that the science in whose light we are to discuss materialism is physical science. There is much to be said for this limitation (quite apart from the fact that none of us are biologists) since in physics we have, as Mr. Sullivan says in his little book *Gallio*, "the master science of the present day and the one which has furnished ideals for the other sciences." But (he adds) the old materialistic outlook is still active in many less developed branches of science; so that, at a time when physicists are abandoning materialism, many folk are "accepting, as the last word of science, a picture of the world that belongs to the early bad manner of physics."* The question we are to explore is whether physicists *are*, and if so in what sense they are, "abandoning materialism." Or to put it in a wider and more convenient form, what is the philosophical outcome of modern physical science? I agree with Prof. Russell and Miss Stebbing that recent developments do not give us an unambiguous lead on this question. The discreet line to take is to disentangle the various possibilities.

In his extremely interesting reconstruction of the stages by which 'materiality,' as required in modern physics, may be developed, Prof. Russell claims that while the old materialism is excluded, a new form of materialism is possible which contents itself with part of what the old asserted. In view of the replacement of 'stuff-substance' by more formally defined but

* J. W. N. Sullivan, *Gallio, or The Tyranny of Science*, pp. 16, 49.

evanescent determinate objects, the new materialism "need not assert anything about the strictly ultimate constituents of things. It is sufficient for it to assert that all the sciences in the end reduce to physics." To this Miss Stebbing adds that "the dematerialism of matter in no sense constitutes a 'revolt' against matter." Whilst this expresses a truth, I cannot help feeling that it only leaves us the kind of verbal materialism so pleasantly and modestly expressed by Mr. Santayana: "I wait" he says "for men of science to tell me what matter is, in so far as they can discover it, and am not at all surprised or troubled at the abstractness and vagueness of their ultimate conceptions. . . . But whatever matter may be, I call it matter boldly, as I call my acquaintances Smith and Jones without knowing their secrets."*

What, however, is meant by the reduction of all the sciences to physics? "It is enough" Prof. Russell says "if the scientist can correlate variations in the properties of the complex objects with variations in the spatio-temporal relations of their constituents." The main force of this is, I take it, to reduce the problem of materialism to that of determining the range of law. Miss Stebbing's contribution tends in the same direction. After showing that, from the point of view of physical science itself, the supposed idealistic tendencies of modern work only arise if we are half-hearted in our rejection of the 'bifurcation theories' forced on us by the inadequacy of traditional notions, Miss Stebbing goes on to stress the central importance, for our discussion, of the conception of law.

In view of what has already been said, I propose to approach the subject from a slightly different direction and to trace the steps by which the conception of law has come to occupy so much more fundamental a place in modern physics than the conception of substance. We shall then be able to consider the philosophical

* G. Santayana, *Scepticism and Animal Faith*, p. viii.

outcome of this change; and shall find, I think, that it involves more of a break with the scientific than with the philosophical past.

(ii.)

Physics, like every other science, is an attempt to disclose the 'order' in a particular domain of fact. The entities used for this purpose, in its early stages, are the concrete things of common-sense thought. But very soon physicists found that their inductive generalizations could be much more simply expressed if they were developed in terms of entities of *the same type* as common-sense things but "stripped conceptually of any properties that happen in a given case to be irrelevant or inconvenient."* Hence there arose a bewildering variety of entities becoming ever more abstract in proportion as the power and range of physical generalization increased. A comprehensive survey of the history of physics enables us to see that these entities are, in each age, *selected* from among many possible entities according to some criterion. The actual form of physical theories seems, indeed, to have been moulded by certain 'ideals of explanation,' or 'demands,' as Prof. Russell has elsewhere called them. Thus the change from mediæval to modern science can be described in terms of a change in our ideals of explanation.† M. Meyerson has been able to show, with great wealth of detail, that the 'demand' which underlay the rise of modern physics was a deep-rooted conviction of the human mind that a rational interpretation of phenomena has been reached when apparent differences are reduced to a real identity—that there is something which persists throughout change.‡ In short, it was a demand which made 'substance' fundamental.

* T. P. Nunn, "Scientific Objects and Common-Sense Things," *Proc. Aristot. Soc.*, 1923-24, p. 3.

† See E. A. Burt, *The Metaphysical Foundations of Modern Science*.

‡ E. Meyerson, *Identité et Réalité*, and *De l'Explication dans les Sciences*.

Now what is distinctive of twentieth century physics is the stress laid upon another demand altogether—namely, the radically empirical demand that *only observable factors shall be considered as in causal dependence*. This demand had already received partial satisfaction in earlier times. Thus Newton successfully attempted to banish some ‘occult qualities’ from natural philosophy, though he was left with others: *e.g.*, absolute space, absolute time and gravitational force—all of which are ‘occult qualities’ in the sense that it was impossible to detail the physical operations in terms of which they could be detected.* We had to wait for the genius of Einstein to produce the synthesis which would satisfy this last demand in a more thoroughgoing manner. One consequence of the demand for strictly empirical reference is that it leads to a still greater abstractness in the entities used, because the ‘model’ type of scientific object, like the common-sense thing from which it arose, still contains more than is necessary. Herein is to be found the reason for the characteristic generality of modern physics.

We can now grasp something of the transformation which this demand has worked in physical theory. The older physicist was content to provide a common-sense account of a given field of fact in terms of postulated entities, usually complicated in structure but built up of parts familiar to the ordinary untrained person. Nowadays he is likely to be elaborating all the possible sets of elementary analytical concepts and their relations which when developed will have the given facts as consequences. That is why the older methodology of science fails to provide the right atmosphere for modern work.† It must not be

* P. W. Bridgman's *Logic of Modern Physics* is an interesting treatment of physical theory from this angle: what he calls the “operational point of view” amounts to viewing physical concepts in terms of this ‘demand.’

† Cf. D. Wrinch, “The Relations of Science and Philosophy,” *Journ. of Phil. Studies*, Vol. II, No. 6, p. 155.

supposed that this method is applicable only to field physics. Heisenberg, for example, made it the basis of his departure from the ordinary quantum theory of the atom; he attempts to replace a system involving unobservable quantities, such as the position and time of revolution of an electron, by a much more generalized matrix system involving only what can be observed, *i.e.* the frequencies of its radiation. In this way physicists have been led to substitute, for persistence of substance, the persistence of causal laws. To put it in a crude fashion, substance is replaced by function: that which behaves in the way characteristic of matter is matter; and so on. A Pickwickian materiality is therefore still possible; there is something corresponding to matter ('disturbance of world structure' or what you will) and something corresponding to material particles ('causal-lines of events,' or Prof. Leonard Russell's 'determinate objects'). But it is stretching language to the limits of even Pickwickian decency to speak of a materialism, since these concepts are no longer fundamental but are *derived* from a wider 'structure.' The problem of their status is hence bound up with the prior question of the nature of the abstract 'structures' in which they are embedded.

(iii.)

So far we have considered only what has been happening in physical science. The result of these changes has been to widen the gulf between abstract 'structure' and the observations to which they are referred. Mr. Bertrand Russell describes the situation with his customary felicity: "From its happy familiarity with the everyday world physics has been gradually driven by its own triumphs, like a monarch who has grown too grand to converse with his subjects."* The problem of

* Bertrand Russell, *The Analysis of Matter*, p. 131.

bridging such a hiatus, in ordinary life, is a *social* problem—that of discovering common topics of conversation. Mr. Bertrand Russell's own solution seems to be curiously akin to this.* What is of concern to us, for our present purpose, is not, however, his solution but the position from which he starts: the dichotomy which regards physics as only giving us abstract structure, leaving the gulf between this and what we actually observe to be bridged by 'Interpretation.' On this view *physics tells us nothing about the external world but its structure.*

In a recent paper Mr. Newman has reminded us sternly that if nothing but structure is known about the external world, then nothing of importance can be said about it. Our knowledge about structure, about things that are *not* percepts, consists only of the kind of things a blind man could be told about a picture. "No important information about the aggregate A, except its cardinal number, is contained in the statement that *there exists* a system of relations, with A as field, whose structure is an assigned one. For given any aggregate A, a system of relations between its members can be found having any assigned structure compatible with the cardinal number of A."† Applying this, now, to the structure revealed in physical laws, it is clear that the mere existence of a given structure (indicated, of course, by

* For it consists in an appeal to what is *common* to several observers. The reality of the physical object is argued from the observable fact that if a number of people look from different directions at the same object their experiences are related in a particular way, according to what can be approximately called the laws of 'perspective'; and that since it cannot be fortuitous that percepts form part of a centrally organized structure, constituents other than those perceived are part of the structure.

† M. H. A. Newman, "Mr. Russell's 'Causal Theory of Perception,'" *Mind*, N.S., 146, pp. 137-148. Mr. Newman goes on to argue that, in addition to the parts of perspective structure that are immediately known, there must be direct apprehension of a generating relation (which might be called that of "causal proximity") if Mr. Russell's causal theory of perception is to serve its purpose.

physical observations) in itself tells us nothing about the generating relations. Consider the world as a four-dimensional aggregate of point-events and suppose that there exists a system of relations, with the world as field, giving the particular structure indicated by physical laws. Then systems of relations differing from these can be found which would nevertheless give the assigned structure. A variety of 'interpretation' is therefore possible, and choice must be made according to some criterion. It was probably considerations of this kind which led Prof. Eddington to suggest that our choice depends on that predilection for 'substantial analysis' whose rôle in the development of physics we have already described. From that it is but a short step to regarding substance as categorical in the Kantian sense.* (It also, perhaps, gives the clue to Prof. Eddington's use of 'actuality' as an extra-physical notion required if we are to break through the closed circle of physical structure.†) This, if I am correctly interpreting Eddington's thought, gives a more precise expression to what Miss Stebbing has called his difficulty concerning the 'conventionality' of laws.

It should be noted, as Prof. Leonard Russell pointed out in his opening paper, that if this view of physics as giving only structure is adopted nothing need, or indeed can, be asserted about the ultimate constituents of the world; so far as physics itself is concerned they may be material or mental or neutral. It would be better, therefore, to avoid calling this view a "new materialism." It might, I suggest, be more correctly described as a form of *Structuralism*.‡

* A. S. Eddington, "The Meaning of Matter," *Mind*, N.S., 114, pp. 145-158.

† A. S. Eddington, "The Domain of Physical Science," *Science, Religion and Reality*, p. 210.

‡ More strictly this should be called *Bifurcated Structuralism* to distinguish it from the species of structuralism to be described later which,

It will be convenient here to refer to another point raised by Prof. Russell. What exactly is implied by his statement that the new materialism, or structuralism, reduces all the sciences to physics? As he defines the requirements this can only be true, it seems to me, if we assume both (1) that our present inability to achieve complete unity between field and atomic physics is a temporary difficulty to which there is no ultimate barrier; and (2) that the so-called 'emergent' properties of complexes represent, as Mr. Bertrand Russell believes, mere scientific incompleteness, so that the various sciences will finally form a hierarchy in which the primitive concepts of each science are the derived concepts of the science logically prior to it. There is this to be said in favour of these assumptions: that they seem to be embodied in the working method of most men of science. But the first goes beyond what we know; the age-long contrast between continuity and atomism may reflect an intrinsic character of the universe. As to the second, we lack as yet the material, based on logical analysis of causality and induction, for a proper judgment. I think, therefore, that we ought to call this view *Pure Structuralism* to distinguish it from the position that there really are emergent properties of complexes.*

We can now return to our main line of thought. If our percepts are only particulars which lead us up to the structure

whilst accepting the structural character of physical law, rejects the 'bifurcation of nature.'

* As in Dr. Broad's 'emergent materialism' and Prof. Whitehead's 'organic mechanism.' I do not imply, of course, that either of these philosophers adopts the position described in the previous note as *bifurcated* structuralism. It might be added that even if emergence is nothing but a profession of ignorance it will continue to be a useful conception so long as complexes like organisms, and even sciences, remain empirically autonomous. Perhaps it will always be useful, since our knowledge is never final.

of law but not to the relational reality generating it, then we are as much debarred from knowing the realities of the world as we were when our picture of it was painted in the early bad manner of eighteenth century materialism. There is, fortunately, another way open to us. It is to insist from the outset that, since we are not standing blindly before the picture, but see it, we do not need an interpreter : that, in short, the reality of the external world including our fellows is as much a *datum* of knowledge as disembodied percepts or isolated structures. This is the way taken by Prof. Whitehead in his radical denial of the " bifurcation of nature." Both particulars and structures are equally abstractions from the concrete flux of the " actual occasion," and we commit the fallacy of misplaced concreteness if we forget their character as abstractions : nevertheless both are as genuine characteristics of nature as the flux out of which they arise. Prof. Whitehead's position (so far as I am able to understand his difficult and developing thought) is a ' structuralism ' in the sense that it gives due weight to the information supplied in structure ; but it does so without accepting the view that structure is all that science can tell us of the external world. In consideration of the stress Prof. Whitehead places upon ' organism,' it might appropriately be called *Organic Structuralism*.

(iv.)

The philosophical outcome of modern scientific thought is not, then, a *direct* materialism. That has been displaced by various forms of structuralism. This is both a loss and a gain. For whilst the generalized character of what is known makes all forms of structuralism vague as to the possibilities that lurk in the recesses of the universe, it nevertheless awakens us to those possibilities. " Thus while our knowledge of what is has

become less than it was formerly supposed to be, our knowledge of what may be has enormously increased.”*

It is now possible, I think, to justify the suggestion I put forward at the beginning, that recent developments involve more of a break with the scientific than with the philosophical past. In science, the passage to an entirely different order of abstractness has wrought a revolution in our whole conception of the universe ; but in philosophy, only the grounds of debate have been changed. So long as physical science adhered to the ‘model’ type of postulated unobservable entity, discussion centred about theories of representative perception. The contemporary storm-centre for philosophers of science is the nature of abstraction as a cognitive tool, together with such allied matters as causality and inductive inference. Abstraction is an old subject of philosophical debate, of course. But there are reasons for believing that some of the earlier misconceptions can now be avoided, in light of its more deliberate and thorough-going employment in recent developments, and of the enormous advance in its technique. It is clearly a more pliant instrument than ever before. No one can read Prof. Leonard Russell’s account of the conceptions now in use without feeling how much more completely the original flux is reflected in them, though without loss in precision. It is necessary to deal briefly with the function of abstraction in science because this brings out, as nothing else can, the changed intellectual climate of scientific thought.

It seems clear, for instance, that abstraction is neither mere increase in our discrimination of what was already known in a concrete setting ; nor bare omission, and hence falsification. For in the first place scientific abstraction gives genuinely new knowledge, supplied in experience but not necessarily of itself experienced. in such matters as the atomic constitution of bodies,

* Bertrand Russell, *An Outline of Philosophy*, pp. 307, 308.

the pre-human history of the earth, and so on. And secondly, scientific abstraction, as we have seen it at work, is plainly integrative and not separative in character: its fruits are structural syntheses. Philosophers are alive to this. Prof. Kemp Smith, in a recent paper, insists that abstraction is more than a methodological device, like a microscope, for studying the partial features of a whole: it is also a recognition of "identities in experience that would otherwise remain in isolation." In abstraction "we are obtaining a knowledge of more than the separate items that make up the real world: we have made a beginning in the task of deciphering what is equally important, its structural pattern."* So that besides the enlargement of our sense of possibilities which structural knowledge brings, there is freedom from the hesitations induced by unfounded fears that abstractive analysis might be either falsification or productive of only 'partial' truth. *Science has become both less dogmatic and more assured.*

That function of the abstract which plays the really fundamental part in its fruitfulness has still, however, to be mentioned: namely, that "it makes possible apprehension of its counterpart, the uniquely individual."† Increased knowledge of structure brings in its train deeper sensitiveness to individual differences. We do not start with what is individual: that is as much the product of analysis as structure. We only come to realize the ill-adjusted, untidy character of our own individual experiences, for example, when we have travelled a considerable way along the road of abstraction. Now this sense of uniqueness which is, as it were, a bye-product of abstraction also acts as a further check on dogmatism. It makes men more alive to what Clerk Maxwell called 'singularities' in nature. Perhaps that is

* N. Kemp Smith, "The Fruitfulness of the Abstract," *Proc. Aristot. Soc.*, 1927-28, p. 206.

† N. Kemp Smith, *ibid.*, p. 214.

why men of science nowadays can face with equanimity such astonishing possibilities as that electrons may be organisms, or that the main structure of physical law does not wholly apply to atomic phenomena. If singular points *do* disturb the deterministic calm of our equations, it need not mean the breakdown of law but only its limitation to other than the unique. I am not sure, therefore, that I can agree with the identification which Miss Stebbing seems to make between the structure of law and determinism. No doubt obscurantists will find in this situation a ground of appeal against all forms of law: but the reply to them is, clearly, that our sense of these singularities only advances with, and is dependent upon, increase in the range and rigour of our structural knowledge.

The deepening of our appreciation of those unique and particular characteristics of the world which give adventitious life and colour to individual experience has another bearing upon our discussion. Miss Stebbing has expressed some uneasiness at the way in which Prof. Whitehead appeals to the poet. She deprecates what she feels to be a tendency to introduce notions of value into the scientific scheme itself. I would not like to say that her fears are groundless; but I suggest that there is another way of looking at Prof. Whitehead's sympathy with the protest of the romantic poets against "the exclusion of value from the essence of matter of fact."* It may only indicate his sense of the contrast between man's structural grasp and his sensitiveness to the unique which we have seen to be a product of abstraction.† For it is precisely when moved by a work of art that we experience most fully that intensifying of consciousness, that encircled satisfaction freed from the tyranny

* A. N. Whitehead, *Science and the Modern World*, p. 138.

† The same contrast, perhaps, as that drawn in *Symbolism its Meaning and Effect* between the deep significance of causal efficacy and the decorative show of presentational immediacy.

of outside significance, which is the developed form in us of "recognition of the uniquely individual." It is as necessary to include these incommunicable but none the less precious experiences in our picture of the world as it is to include sounds and colours. This is not to say, I need scarcely add, that science itself can deal with them. For they are, as such, unique; although the developed character of æsthetic judgment means that it is related to our structural grasp.* Nor does it mean that value enters into the scientific scheme as a determinant of the world order; for in its character as uniqueness it can scarcely determine structure. Æsthetic and moral values have often, it is true, affected our *knowledge* of the world order, even in science--as when ideals of explanation such as 'relevance,' 'economy,' 'elegance' and the like have been employed. But the history of science is the story of gradual disentanglement from such normative 'demands' and of steady progress towards a positive, "ethically neutral" empiricism. For these reasons I do not share Miss Stebbing's repugnance to including values in a philosophy of nature. I feel that their presence gives a surety that it *is* a philosophy of nature. Value, like everything else, must find a natural place in any scheme of thought presented as an account of this amazing world and all that it contains. Eighteenth century materialism did not achieve this consummation. Structuralism may.

* I mean by this that our sense of unique quality in a work of art will partly depend also upon our appreciation of its *formal* significance.



SYMPOSIUM: TIME AND CHANGE.

MR. J. MACMURRAY, MR. R. B. BRAITHWAITE AND
DR. C. D. BROAD.

I. *By* J. MACMURRAY.

(i.)

ANYONE who has groped with a serious purpose amongst the perplexities which surround the philosophy of Time and Change must understand why it is natural to take one's stand upon the theories which have been elaborated in connection with physical science. Where so much is confused and bewildering, there at least we find a doctrine of Time which is clear and consistent: where so much is indefinite, science offers a starting point which is definite and determinate. The cry for a clear and distinct starting-point is a familiar one—the voice of the philosopher crying for the moon. To start with clarity is to start at the wrong end, and progress from clarity is apt to be towards confusion. It is worse than useless to accept the scientific theories of Time as a basis for a philosophical discussion of the nature of Time and Change. Whether physical science has anything to tell us about the real nature of space, I cannot say. It may have. But it certainly is not in a position to start us on our journey in search of the real nature of Time. This is simply because physical theories

all treat Time on the analogy of Space. Our physical theories, however advanced, are all geometrical in origin. Problems involving Time have caused great developments in the theories of physical science; yet throughout the history of the physical sciences the geometrical character of their origin has persisted, and determined the form of the theories. Time had, as it were, to be fitted into a physical theory primarily concerned with space and measurements in space, in a fashion which would produce the minimum of disturbance in the geometrical theory. The Roman lawyers, faced by the necessity of recognising as bearers of legal rights not merely persons but groups of persons, managed to do so by lending a fictitious personality to corporations, and thus avoided any violent change in their general theory of rights. So the scientists, finding it necessary to take Time seriously if they were to succeed in solving their problems, discovered a means of treating Time as if it were spatial, or at least on the analogy of Space. That this is possible, within limits, and for the purposes of physical science is not without its bearings on the nature of Time. The practical success of physics in dealing with problems involving Time presents us with an important philosophical problem, viz., "How is it possible to treat Time, for certain purposes, as if it were a one-dimensional continuum of contemporaneous positions?" But this is a problem about the nature of Time; not the solution of a problem. The solution obviously demands an enquiry which goes right behind the theories and methods of science to the real nature of that which science handles in terms of an "As-If." A philosophy which forgets this, and accepts the scientific theory as the truth about the nature of time rather than a method of dealing with Time analogically, must inevitably conclude that Time is unreal. The history of Cartesianism proves the point: and even Kant, with his profound insight into the importance of Time for philosophy, could only secure a place for it by reducing Space to the same level of unreality and

by proclaiming the impotence of any metaphysic to transcend the world of appearance which Space and Time together determine.

If we may not start from scientific theories, then, where must we begin? We must get behind science itself to the more concrete if less definite world in which scientific problems arise. We must ask, "In what connection does Time enter into our experience of the world?" or, perhaps better, "Why is the idea of Time indispensable in any attempt which we make to describe the nature of our world?"

To *this* question the answer can hardly be in doubt. It is the fact of change which demands the idea of Time for its elucidation or description. In the absence of change there would be no *need* for the conception of Time: i.e., the knower of such a world would not require to take time into account in determining or defining anything. A world without change would be a world without events, without a history, without happenings or processes.

Here arises the first question to be answered. Can we argue that because for the knowledge of a changeless reality the idea of Time would be unnecessary, therefore such a reality would in fact *be* timeless. It might be held that such a reality could have duration, and that therefore in it there would *be* Time, although in the absence of change Time could not be apprehended, and although its apprehension would be unnecessary for the knowledge of the reality.

The question is of the first importance. It has been a dogma of many of the greatest philosophers (*e.g.*, Plato) that Changelessness is the hall-mark of Reality. This indeed is a fundamental implication of the view that Reality is Substance, that which is self-identical through all appearance of change. Any consistent philosophy which maintains this position must deny the reality of Change, and therefore the reality of all those aspects of our

experience which require the idea of Time for their description. Substance is that which is known by the comprehension of its essence ; the knowledge of which can be at one moment complete, and which therefore can never really *be* at one moment what it is not at another. Such a conception excludes change from Reality, and with it activity and causality. It yields a metaphysic of universals, a philosophy whose verbs have no tenses.

To such a Reality Time could only be added, *ab extra*, as the fact of duration. We have therefore to ask whether Time can be mere duration, *i.e.*, whether a changeless reality could endure. We will examine this question first from the side of the Subject and then from the side of the Object.

In a Reality without change the Subject would itself necessarily be changeless. For such a Subject there could be no such thing as thinking, no process of acquiring knowledge. The Subject must then be a consciousness without beginning or ending, complete and self-identical throughout its infinite duration. There could be in it no differentiation of attention, for that implies change, and likewise no differentiation of interest ; and since values imply a differentiation of interest, it could have no values. It could not be aware, therefore, of any meaning, since meaning implies reference, and reference involves certainly a differentiation of attention, and probably a differentiation of interest and value as well. Now such a consciousness could not apprehend difference ; for the apprehension of difference involves at the least the *possibility* of a differentiation of attention—the possibility of attending to one part or to another part or to the whole. Kant may have been wrong in thinking that to apprehend a manifold in one act of consciousness its elements must first be apprehended separately and successively—if indeed he did think this. But it seems to me inconceivable that a manifold could be apprehended as a manifold without the possibility of its elements being attended to separately, or that such a manifold could be thought

as a unity in the absence of a power to select some element in the complex as central to the organisation of the whole, and so to attribute to some element a logical priority. All consciousness involves discrimination, and discrimination must involve the possibility of attending to form rather than to content, to relations rather than to terms, to the unity rather than the discreteness of the complex before consciousness. A changeless Subject would be a Subject deprived of the possibility of discrimination. The idea of it is self-contradictory. Its consciousness is the negation of consciousness – a capacity to be aware of everything without being aware of anything ! It realizes a lower level of unreality than even the pseudo-consciousness of the behaviourist, which if it does not exist, at least behaves ! A consciousness which merely endures, without change, we conclude, cannot even exist : and a reality which merely endured would exclude consciousness.

From the objective side a changeless reality would then be a world which excluded consciousness, and in which consciousness could not arise. It could therefore never be the object of any consciousness, and could not be known. But further, it would be a world without causality, without resistance or energy, a mere togetherness of things without any interaction of things, and therefore a world without determination. In it there would be no reason why anything should be what it is or where it is. For the only conceivable principle of differentiation which is not derived from the subject must be in terms of energy. It might be objected that such a world without change might still be a world of energy, conceived as an equilibrium of forces, yielding as its result a whole which merely endured. But in that case all the forces present would exhaust themselves in maintaining equilibrium, and the whole would be without energy. Such an equilibrium of forces would provide no principle of persistence. If, on the other hand, the whole has an energy which is not merely the energy of its parts, then the energy of the whole is free energy and must there-

fore be effective energy, *i.e.*, it must produce change. But since there is nothing outside the whole, the whole must show its energy by changing itself, *i.e.*, in what would be, for the subject (if, *per impossibile*, there could be a subject,) an evolution of Reality. Either then the whole Real is without energy, in which case it is without determination, without any principle of differentiation, and so not a world at all, but a non-entity : or it cannot endure without changing. In either case a changeless world is an unreal world.

This argument may be put in another fashion. The conception of Reality as a static whole maintained and differentiated by an equilibrium of energies implies a world where all energy is potential. I submit that the conception of potential energy is absolutely devoid of meaning in a world where energy does not, and in its nature cannot, ever become actual by expressing itself in change. This does not necessarily imply that in any real whole every element is always in process of change. It means no more than that any whole which is differentiated and maintained as a unity by energy must, as a whole, possess free energy over and above the potential energy involved in maintaining a static equilibrium, and, therefore, as a whole, must change itself, or something other than itself. As there is no other than Reality, the Real must change itself, and so be an evolving Real. There may be within it, so far as the argument goes, elements which do not change, or are not in continuous process of change. If there are such elements of permanence in Reality, however, they can only exist as elements in a changing Reality.

Here, then, we may formulate a first general conclusion. *A Timeless World is unthinkable and cannot exist. Mere duration is not Time. If there is to be Time there must be Change. The Reality of Time is, therefore, inseparable from the Reality of Change.*

In effect, we have shown that it is permissible to argue from the uselessness of the concept of Time in the knowledge of a changeless reality to the non-existence of Time in such a reality. Upon this conclusion hangs all that follows.

(ii.)

The second part of the discussion concerns the nature of Real Change. In order to lead up to the answer to the question "What constitutes real change?" I propose to examine briefly the conceptions of change employed in Physical and in Biological Science, and to show that neither the conception of physical determinism, nor the conception of evolution, can give reality to Change, and therefore to Time.

Physical theory, starting from observed changes (changes of appearance) disentangles from those changes which are real, viz., changes of position. But a change of position, as such, is *not* real change. Space itself has no position; and positions in space, as such, are indistinguishable. They are not even distinguishable relatively to one another, except in terms of something which "occupies" them. It is natural, though *perhaps* not necessary, to distinguish positions in space relatively to the position of an observer. Suppose that a field of visual perception A changes to A'. Taken as wholes of presentation A and A' are different presentations. If we are to describe this change objectively by saying that in reality an object O in space has moved from a point P to a point P'—(A and A' being the presentations to an observer of the beginning and the end of the movement)—then we interpret A and A' as different presentations of the same external extended world, which is a world of objects of which O is one. The objects presented in A and A' are the same objects, and there is a continuity of existence of these objects through the whole movement. We then say that the object O has changed its position from P to P'.

But what has changed ? Surely nothing. The objects remain, by hypothesis, unchanged throughout. The Space and the positions in Space remain necessarily unchanged. And there is nothing else. We try to evade the difficulty by saying that the object has changed its position. But this is only a verbal subterfuge. The object has occupied various positions—an infinite number, in fact—but it has changed none. The only real change which we can find is precisely the subjective change in the observer, which has been ruled out in terms of the theory ; and *that* change is not a change of position. We are compelled to conclude that change of position is not real change at all, since in it there is nothing which changes.

This conclusion does not follow from the reference to an observer as such. It could be restated in terms which do not imply subjectivism. Any alteration in the objects occupying space would serve the purpose equally well with alterations in the field of presentation. The conclusion would be, in that case, that change of position is meaningless apart from an alteration in the character of the objects occupying space. In a system of objects in space the positions of the objects are a function of their reciprocal influence, and changes in relative position are a function of changes in this reciprocal influence, that is to say, of alterations in the states of the objects concerned. But for philosophical purposes the reference to an observer is essential, at whatever point it is brought in. For while science may, and indeed must, abstract from the subjective factor in experience, metaphysics, which deal with the whole real, and must, therefore, include the whole experience, may not.

The result of the preceding argument is, of course, absurd ; and the argument is propounded as a *reductio ad absurdum*. It enables us to see, however, that to escape from the absurdity we are obliged to give up the view that the real elements of the

world do not change. To do this is to confess that things are modified in their nature in terms of their temporality, that they are really different at different times. This introduces, in fact, the idea of evolution as pertaining to the essence of reality. But there is an intermediate position—a half-way house, as it were—which we must consider first, particularly as it explains how it is possible, up to a point, to treat a changing reality as if it did not change; *i.e.*, to treat time as if it were mere duration, and, therefore, to succeed in applying a geometrical theory to an evolving world.

What makes this possible is the idea of cyclic change, the conception of recurrent series. A recurrent series, taken as a whole, does not change, and can therefore be regarded as a single unit. The series can be defined as a whole; *i.e.*, the various elements of the series, which are really successive, can be apprehended by the mind at once, and so represented as contemporaneous. Thus time itself can be represented as a line, *i.e.*, as a series of contemporaneous positions, as a direction. So far then as changes are cyclic, and the whole series can be grasped (either concretely or symbolically) in one act of apprehension (as in an equation, for instance)—so far real changes can be treated as repetitions of an identity, and so as the mere persistence of the same thing. That this does not help the metaphysical position we have already seen; for mere persistence, or duration, is not time. In fact, this treatment of change (proper for physics) is a convenient way of dodging a metaphysical difficulty.

This principle of cyclic change gives rise to a modified metaphysical position which maintains that the Real does not change, though change takes place within it. The Whole Real is thus treated as a cyclic series which, taken as a whole, is changeless, *i.e.*, whose Time is mere duration, a persistence in its own being. Such a metaphysic, however, is untenable in view of the general conclusion of Part I. Yet in so far as it recognises change within

the limits of the cyclic series, it recognizes time. But the time which it is so striving to realise is not real time. It is time disguised as sequence. The sequence, taken as a whole, does not change. The sequent events within the series do not change. Within one cycle they give place to one another. In different cycles they recur, identically. No one of them is the cause of any other ; and therefore the cause of any event in the series must be looked for outside the series ; and yet outside the series there is nothing but mere duration in the form of repetition of the same series. For mere repetition, *i.e.*, mere duration, there can be no cause, for a cause is always the cause of a change. In other words, a sequence of events, as such, is only a succession, and can be considered as a change only with reference to an observer, in whose field of perception there has been a real alteration. To escape from subjectivism in this instance we must presuppose an objective reality whose nature it is to change, and which is therefore an evolving reality. The argument is in form precisely similar to that used in refuting the idea that change of position is real change, and need not be further elaborated.

We are therefore driven, in our search for real change, outside the limits of physical theory ; and we are driven to consider the claims of evolutionary theory to make change real, since evolutionary theory conceives change to belong to the essence of the real, and not to be the appearance or the phenomenon of changelessness. Evolutionary theory at least maintains that there is real change which is not cyclic.

But it will not suffice to represent reality as a sequence of events which do not recur. For again, in such a sequence there is nothing which changes. The sequence only seems to be change for an observer, and is really a change in him, dependent on the summation of the earlier events in memory. But the moment we admit the observer into this world-conception, we

admit something which is not a sequence of different events, and our formula will no longer express or describe the reality.

The conception of evolution demands, therefore, if it is to escape subjectivism, that the past should somehow be continued into the present and summed up in the present. The present event will then be the sum of past events and something more, something new. At the same time it must be one event : its newness cannot be separated from what in it is the summation of the old. It must be complete in itself, and completely present. For this reason again we find that Change and Time are here only for the observer ; for whom the present event is differentiated into a series of events, each complete in itself, arranged in an order of increasing complexity of content, and *representing* a sequence of development. Or, to put it otherwise, the past, as past, is still unreal. It is real only as present, as that which has persisted, not as something which is changing. Therefore, it adds nothing to the determination of the present, and cannot account for the novelty in the present. What is recognised as novelty by the observer remains entirely unaccounted for, and so objectively unreal.

The argument which I have here stated in an abstract and concentrated form is of great importance. If it is correct it goes to the root of all evolutionary philosophies, whether they take an Idealist or a Realist form. To illustrate it by a concrete application I propose to offer a general criticism of the metaphysical basis of Professor Alexander's "Space, Time and Deity." Lest the crudeness of my criticism should seem to indicate a lack of appreciation and reverence for a great man and an eminent living philosopher, I should like to take the opportunity of stating my opinion that Professor Alexander's work is not only the greatest achievement of constructive philosophical speculation since Lotze at least, but also the completest, probably the final, embodiment of the logical

principles defined by the dialectic of Hegel. This is not the occasion to explain or to justify my opinion on this point, and I pass on, therefore, to a criticism which must, on account of its brevity, appear to be, although it is not, an unsympathetic and high-handed one. It is, in effect, that the effort to "treat time seriously," is frustrated by the inadequacy of the logical formulæ which form the ground plan of the construction. There are two main problems which face the modern philosopher. One is to build a logical bridge between the mathematical conceptions which lie at the basis of the physical sciences and the organic conceptions upon which the sciences of evolution rest. The other is to define and transcend the limitations of the evolutionary conceptions themselves. The metaphysic of "Space, Time and Deity" fails, it seems to me, at both these points. It fails to unite the mathematical theory of Space-Time with the evolutionary theory of emergent qualities, and its failure to transcend the evolutionary formula shows itself in the tendency to behaviourism, the inability to do justice to the spontaneity of the mind.

The basic doctrine of Space-Time is a Substance-theory which differs little, on its formal side, from earlier substance-theories such as that of Spinoza. Space-Time is a stuff or substance, which is analysable into a continuous structure of identical units, pure events or point-instants, in accordance with strict mathematical principles. Space-Time is movement. As a physical theory this seems to me to be a great advance upon any earlier theory of substance, and I find it no more difficult to admit the reality of the pure event than to admit the reality of any other mathematical entity such as a point or a triangle. My criticism of this side of the theory has already been given. Space-Time is not change, it is movement, and movement is nothing except in relation to a real change, or alteration in the nature of things.

The idea of substance is relative to the idea of attributes, and Space-Time expresses itself in a system of attributes--the qualities. At this point the evolutionary conceptions are superimposed upon the mathematical, and the attributes of substance become a series of "emergent" qualities, each arising on the basis of another which has already emerged. These emergences of novelty fulfil the demands of an evolutionary series, since the later arises upon the basis of the earlier and combines with it to form a single present. But as emerging, the new events are mere happenings. There is nothing in the nature of the earlier qualities to determine their appearance. The elements in the evolutionary succession are not determinately related to one another, but only to their Space-Time correlates. Now the evolution we are concerned with is an evolution of qualities, not an evolution of Space-Time. Space-Time, as Substance, is the permanent substratum of change, and cannot itself change. Space may differentiate Time, but it cannot take time to differentiate it; and in any case all real change, as we have seen, must be a change in quality, while all the differentiations and complexities of Space-Time itself must be quantitative only. Thus the persistence of a substance-attribute conception of the real as the basis of the metaphysic leaves the evolutionary conception without any organic connection with the rest of the doctrine. Professor Alexander is thus compelled to *identify* the emergent novelties with their Space-Time correlates, and so to deprive them of reality. They become "appearances" of a Space-Time which is the Reality underlying them, and in this way the admission of change of quality or evolutionary novelty is nullified. All real changes are then quantitative and not qualitative: are, in fact, movements, and the metaphysic reduces on analysis to the class of theories which we have already abandoned.

There is another aspect of the exposition which reveals the difficulty of giving reality to Time on such a basis, and the pressure

to "spatialize" Time by robbing it of efficiency. Professor Alexander urges us to think of the relation between Space and Time on the analogy of the relation between Mind and Body. "Time," we read, "is the mind of Space." Now it is one of the outstanding features of Professor Alexander's doctrine that it tends to reduce mind to a specialized function of the body. No one has urged more stoutly that mind makes no difference to its object, that consciousness is contemplative merely, that even in Art, which we have always taken to be the illustration *par excellence* of the creative spontaneity of the mind, the mind does not produce, but discovers its object. This reduction of mind to a position of practical impotence, of contemplative passivity, goes so far that we find Professor Alexander himself in doubt if he ought not to throw in his lot with the behaviourists, and so to declare explicitly that consciousness is a function of the body. If then we take the analogy between Mind-Body, and Time-Space, seriously, as we are invited to do, must we not conclude that Time is really a function of Space, that like its analogue Mind it is in itself passive and impotent. Ought we not to be doubting whether there is such a thing as Time at all and to be looking rather for a more complicated, more functional conception of Space—perhaps a four-dimensional Space?

The failure to make Time real can be seen more directly. The reality of Time depends upon the reality of succession, that is to say upon a real and not a relative distinction between past and future. Now in some sense the distinction between past and future in Professor Alexander's metaphysic is a relative distinction, depending upon a point of view. What from one point of view in past may from another point of view be future. If this is so, then from the philosopher's standpoint, *sub specie æternitatis*, the Real is one eternal present, and Time has disappeared. On its evolutionary side, however, the doctrine aims at giving reality to the future. Reality has a *nisus* towards

Deity, a quality which has not yet emerged. But is it possible, consistently with the general position, to maintain that God is yet to come ? Or is it rather the fact of our humanity that makes God the future *for us*, relative to our place in the scale of qualitative complexity ? We, being human, cannot *conceive* God as presently existing, though He may exist in the present, just as for a dog humanity is the future. If this is the proper conclusion of the metaphysic - and the argument seems to give grounds for no larger conclusion—then what is here called Time is in reality an order of qualitative complexity in the present.

The failure to make Time real is a failure to transcend the evolutionary conception of Time. We have already seen why the idea of evolutionary process must inevitably fail in this fashion, in spite of the most determined efforts of the subtlest thinker. The schema of evolution is a sequence of appearances, which, because they are not cyclic, cannot be defined as a unitary whole, and which, therefore, provide no rational ground for the emergence of the novelty which is essential to the evolutionary idea. So far as an event exhibits real novelty, so far it is a mere undetermined happening for which no ground of determination exists in the nature of the Real. A series of emergents is, almost by definition, a series of events between which there are no necessary bonds of relation, and which cannot therefore form part of any rational system of reality.

(iii.)

What then must be added to the theory of emergent evolution to transform it in such a way as will yield a conception of real change and of real time ? We need, it is clear, the idea of a rational efficiency in the real for the production of novelty. We need a true creative principle, of the essence of reality, which will by the necessity of its own nature produce the new out of the old. This alone will yield the conception of a self-creating Real. Without

it any novelty (*i.e.*, any real future) must be accidental to the Real, and so mere appearance.

Such a principle is the principle of practical reason, the conception of concrete Reason as efficient cause. It is necessary, if there is to be real change, that the present should produce the future, without containing the future in itself. In spite of the metaphysicians since Hume who have denied it, we must reassert that the category of Causality is meaningless apart from the idea of a power belonging to the cause to *produce* its effect. Without this we are left with a mere sequence, and so a mere present. What is necessary for the reality of change is a real and necessary differentiation of past and future, so that the past shall be really past (real as past) and the future really future (real as future), and this can be done only if the present is not an imaginary point of transition merely, but a real point of agency. The past cannot be real unless the future is real, for the two are correlative. Time is one, and cannot be partly real and partly unreal. The future cannot be real unless what will be is *necessarily* not past nor present, *i.e.*, *necessarily* has not been and is not.

In considering the various current ways of accounting for change and time, we found that we were continually thrown back upon the observer as that in which alone real change could be found. Thus, the physical theories tend to pass over into subjective idealism (as in Berkeley), and the evolutionary theories tend to pass over into a subjective spiritualism (as in Bergson). There is a good reason for this transition to subjectivism, *viz.*, that change, and so time can only be real in terms of consciousness—indeed in terms of the practical consciousness. For the future can only be real for an active consciousness, and the past can only be real relatively to a real future.

I shall conclude with an attempt to show why this is so. In the first place Mind (or the concrete knowing subject) is essentially an immediacy of apprehension—an eternal present. Whatever

I know, I know now. All the mediacies of judgment and inference are not themselves acts of knowing, but conditions of knowing. Knowing is essentially contemplation and enjoyment, as Professor Alexander insists, a receptivity of Reason. Therefore, for the knower, what represents Time is a present order in what is presently apprehended. This, as we have seen, is not real time, but only its phenomenon.

Yet as its appearance, even this order is only thinkable in terms of real time, as the present representation of real change. This is possible because the contemplative consciousness is an abstract aspect of the complete practical consciousness which includes it. I can think time, that is to say, because I know that at any moment I can desert the receptive attitude of knowing for the actuality of conscious practical activity. It is this consciousness of myself as agent, surrounding and sustaining my consciousness of myself as knower, which makes possible the reflective thought of change and so of Time. Indeed, if we must refine still further, the thought of myself as knower is itself abstract. It is the thought of a zero, a *terminus a quo* of a consciousness which is, so far as it is real, essentially practical. Knowing itself is real only as a practical activity.

The reflective consciousness (Mind) is thus in itself essentially timeless and unreal. But when thought in terms of the agent—as an aspect of practical Reason, and so in terms of change, it is the present—the evolutionary present, gathering up into itself in a present immediacy all the past, and presenting it as a complete synthesis, a complete whole—the whole real for reflective consciousness, a timeless real. This timeless whole becomes the past by being negated by the agent. It is for the agent that which has been effected, completed and is now done with. This negation, however, is possible only in terms of its correlative, the real future, not merely that which will be, but that which shall be effected. The future is thus for the reflective consciousness, unreal and imaginary. Indeed within the contemplative

consciousness it is the imaginary which *represents* the future, although, of course, the imaginary is itself part of the timeless present of contemplation. Conceptually, the real future is the *possible* as distinguished from the actual. Again, we must admit that for the reflective consciousness the "possible" is an unreal conception. The real "possible" is not that which may happen, but that which may be effected. It is a conception of the practical reason, which negates the reflective or passive attitude.

We have seen that real change is evolutionary change, an alteration in the character of a present reality involving the emergence of novelty within the reality. What we are now compelled to add to this conception is the determination of the emergent novelty by the real itself. So long as the novelty merely emerges it merely happens, and so remains epiphenomenal to the real, not determined by it. My suggestion is that when we realize that the real is essentially practical, when we recognize ourselves to be agents rather than subjects, when we see that reason itself is not speculative but spontaneous and active, then we can account for the emergence of novelty as the expression of rational spontaneity. For the practical reason the real is not the synthesis of Subject and Object, but the unity of the Agent and his field of activity. We might illustrate this by considering the sculptor modelling and remodelling the clay into a more and more perfect form. Here there is an emergence of novelty indeed, but it is no mere emergence. It has its ground, and its sufficient ground, in the spontaneity of the sculptor's rational agency. The possibility of a real future for the shapeless lump of clay lies in its passivity to the transforming agency of a practical, not a contemplative consciousness. The conception of organic evolution merely notes the fact of the emergence of novelty in the real: the conception of practical reason supplies the fact with a rational ground in the nature of the real. Given a rational ground for change then the change is necessary and

real ; without this it is unreal and mere appearance. But it must be remembered that the necessity is a necessity of the practical and not of the speculative reason ; that which must be produced, and not that which must be predicted.

Thus the conception of practical reason, or of the Agent yields us the possibility of a real future. The whole real of the speculative consciousness, its eternal present (the very phrase is a self-contradiction, being the idea of a timeless time), becomes at once, when referred to the Agent, a real past, the synthesis of what has been achieved by agency : and the present, at once uniting and dividing the past and the future, is for the Agent the point of transformation, the point of practical rational efficiency.

What, then, is real Time ? The present is unreal without a real past. The past is unreal without a real future. Thus what gives reality to the present and the past is what gives reality to the future. Now only consciousness, as memory, can give reality to the past, and only practical consciousness can give reality to the future. If, then, we are to "take Time seriously" - and we must do this if we admit the reality of change - there seems to be no escape from the conclusion that we must conceive the Real in personal terms, since only a person can be a rational agent. The agent makes the past real by gathering it up, as Knower, in the objective synthesis of rational reflective consciousness. He makes the future real by transforming this past, which he himself, as ground of all practical possibility, transcends. Therefore, the conception of practical reason affords a principle embodied concretely in the actual world, which serves as the ground of the continuous emergence of novelty ; and as we have seen, this alone makes Change real, and with it Time. For Time, we now realize, is simply the form of all possible change, the *schema* of the practical reason, which when represented in the timeless present of the reflective consciousness, appears as an order of succession.

II. *By R. B. BRAITHWAITE.*

MR. MACMURRAY'S paper opens with the contention that "it there is to be Time there must be Change." If this "must" is to be taken epistemologically, I agree with Mr. Macmurray: as he says, "in the absence of change there would be no *need* for the conception of Time." But Mr. Macmurray goes on from this to the assertion of a logical necessity, and here he seems to me on more doubtful ground. It is surely logically possible that a world should persist in time without any change: of course our world is not such a world; if it were, we should not be able to know it, still less to know that it was temporal. But I see no reason why, if we already know what time is, we should not conceive an unchanging but temporal world in the same way in which we can conceive a lifeless world; for I cannot agree to Mr. Macmurray's dictum that "a world which excluded consciousness . . . could therefore never be the object of any consciousness." This logical possibility, however, is not the main object of our symposium; and I shall not discuss it further. For everyone will agree that, whether or not time is possible without change, our knowledge of time would have been impossible without a knowledge of change. And the question before us (to which Mr. Macmurray has given an affirmative answer) is:—"Does the acceptance of change entail the holding of a particular metaphysic?" Consequently I shall first state how the elements in our knowledge of time are derived, and shall then discuss the alleged difficulties about change and shall try to show that we can accept change and take time sufficiently seriously without being forced to accept any particular philosophical conclusions (Mr. Macmurray's 'conception of the real

as Agent,' for example, or Dr. Broad's denial of the existence of the future). The theory of time that I shall advocate is essentially the same as that propounded by Mr. Bertrand Russell ("On the Experience of Time," *The Monist*, 1915) and defended by Mr. R. M. Blake ("On Mr. Broad's Theory of Time," *Mind*, 1925); and I shall be very brief where I have nothing to add to what these authors have said. And I shall say nothing about the logico-mathematical methods of Dr. Wiener, Mr. Russell and Dr. Whitehead for obtaining a time-series of instants out of our experience of extended events; for these are not matters that can be profitably discussed here.

(i.)

Our knowledge of time is derived from two facts of immediate experience. (1) There are many cases of change in our immediate experience in which we are acquainted with two distinct things, and when we are directly aware that one of these things succeeds the other. When I move my hand rapidly across my field of vision and watch its motion, I am immediately acquainted with events which fall within my "specious present," and there are pairs of these events of which I know directly that one succeeds the other. (2) There are many cases in which we are immediately acquainted with two distinct things and when we are directly aware that neither of these things succeeds the other, *i.e.*, that they are simultaneous. When I hear two tuning-forks of different pitch struck at the same time, I am acquainted with two notes of whose simultaneity I am directly aware. Thus the relations of succession and of simultaneity are as much given to sense—sense-data—as any of the other objects of immediate experience. They are in no way derived from our ideas about the past, present and future; and they are in no way subjective, but are as objective as the entities between which they are perceived to hold. We may be driven by the facts which lead to the Theory of Relativity

to admit that simultaneity is not a dual but a triple relation in which the place of the things asserted to be simultaneous must enter; but similarly we may be driven by arguments about pennies to the "multiple inherence" theory of sense-perception and to admit that the relation between the object of perception and its observed properties is triple and not dual. In neither of these cases would the fact that the place of the observer had to enter into the relation make the relation a subjective one. The only subjective element would lie in our having mistaken a triple relation for a dual one.

It is important to notice that the relation of succession as given in experience has an intrinsic sense. We perceive directly that there is an intrinsic difference between A succeeding B and B succeeding A. As Dr. Broad points out, in the perception of spatial relations on a straight line, we perceive an intrinsic order, *e.g.*, that B is between A and C, but the series ABC only acquires a sense through some extrinsic determination. Temporal relations, however, have an intrinsic sense as well as an intrinsic order, but (and here Dr. Broad goes wrong) this intrinsic sense of the fundamental temporal relation of succession is as much an immediately experienced fact as the intrinsic order, and is in no way derived from the distinction between present, past and future.

This relation of succession, of which we sometimes have knowledge both of its holding and of its not holding, can serve, by virtue of having the properties of asymmetry and transitivity, as the fundamental relation by means of which the mathematical logician can build up temporal series. The "extrapolation" outside our experience required in this construction will consist in assuming that there are non-experienced entities between which the experienced relations hold and not that there are other ultimate relations which are not experienced. Thus in the construction nothing will be used that is not of the same nature as those things of which we are directly aware.

But a relation different from succession enters into our notion of the present, and this relation may quite properly be called subjective. It is the relation between experiences of being experienced together, which, following Mr. Russell, I take to be the fundamental relation in the analysis of the "specious present" and hence of the important senses of the present. After him, I would define a "momentary total experience" as "a group of experiences such that the objects of any two of them are experienced together, and anything experienced together with all members of the group is a member of the group." Then a "specious present" is the time-duration of a "momentary total experience," the meaning of time-duration being already given by the logico-mathematical method. The specious present so defined is subjective in that it is derived from the subjective relation "being experienced together." Of course, if a theory like neutral monism is true, this relation will also be an objective relation; but in any case, there is certainly a sense in which it is subjective and the relation of succession is not, for the latter is perceived primarily not of our experiences themselves, but of their objects.

McTaggart, in §344 of *The Nature of Existence*, uses the admitted subjectivity of specious presents as an argument to prove that, even if time is real, time as observed is either unreal or subjective. McTaggart thinks that he has proved, by arguments about change with which I must deal later, that all temporal relations depend upon the predicates present, past and future; and, if this be admitted and if it were impossible to produce an ultimate present not necessarily simultaneous with a specious present, McTaggart's argument would have great weight. But if we do not admit these premises (and McTaggart makes no attempt to prove the latter), the argument loses all its force. The fact that our experience of a relation always lies within a period of time subjectively determined is no ground by itself for supposing that the relation

itself is subjective. Moreover, such an argument would prove that the terms of the relation of succession are as subjective as the relation itself, and would not be particularly directed against the objectivity of time.

To return to the present, past and future. According to the theory which I am advocating, these words are used in three different sorts of contexts with three different meanings. The first presents no difficulty relevant to our discussion. To say that A is present or past or future *at a time* T is to say that it occurs at, before or after the time T. Of course a complete analysis would have to show exactly what is meant by occurring at or before or after a time and exactly how the instants of time are derived from the extended events with the primitive relations of succession or simultaneity. But this is a matter with which we are not concerned here. The second sense is more interesting. To say that A is present, past or future relative to an event B is to say that A is simultaneous with B or that it precedes B or that it succeeds B. Thus to say that A is present relative to a sense-datum which I am experiencing means that the two are simultaneous. In neither of these two senses of the set of words does a thing have all three predicates—present, past and future—nor does anything change one of these predicates for another. But the meaning of the words which causes the trouble is when they are used not elliptically to express relations to some other thing (a time or an event), but in what Mr. Blake calls an “absolute” sense. What is meant by saying that A is present *tout court*? And how can it have all three predicates—present, past and future—in this absolute sense?

The solution which I accept is that, when I say that A is present, I mean that it is simultaneous with some event which I am experiencing within my specious present when I make the statement; and when I say that it is past or future, I mean that it precedes or succeeds every event which I am experiencing

within my specious present when I make the statement. And these experienced events lying within the specious present of mine when I am making the statement are things with which I am immediately acquainted; they are not things given by description as the things which have the property of lying within a specious present of mine now, and so the vicious circle of defining the present in terms of the present is avoided. According to this view, "present" as used in this sense is similar to "this": both these words have definite meanings in the contexts in which they occur through having reference either directly or indirectly to objects with which the assertor is immediately acquainted, and hence, though their meanings are perfectly definite on the particular occasions when they are used, they have no general meaning common to all their uses, but only a common type of meaning. If I say on the occasion of a distant thunderstorm that a flash of lightning is present, and follow it by saying that a sound of thunder is present, I do not mean by "present" the same thing on the two occasions: in the first case I mean that the flash of lightning is simultaneous with some part of one specious present of mine, in the second case that the sound of thunder is simultaneous with some part of another specious present of mine. But the fact that I am immediately acquainted with these parts of specious presents gives both these statements definite meanings and avoids the vicious circularity of defining present in terms of a specious present which is determined as being present in the sense we wish to define.

"The difficulty about past, present, and future," writes Dr. Broad in Chapter II of *Scientific Thought*, "in general can be summed up in two closely connected paradoxes. (i) Every event has all these characteristics and yet they are inconsistent with each other. And (ii) events change in course of time with respect to these characteristics." In the "absolute" sense of present, past and future which I have just explained, the assertion

that an event has all three characteristics is false, while nevertheless the separate assertions that a certain event is future, that it is present and that it is past may all be true. The assertion that Queen Anne's death is present, past and future is false whenever it is made; yet Bolingbroke, George III and William III might all have been speaking the truth if they had said that it was present, past and future respectively. The first of Dr. Broad's paradoxes is thus resolved by noticing that "present," "past" and "future" are words like "this" with different meanings whenever they are employed. What of the second paradox? The reality of change is the main argument against the simple and almost naïve theory of time which I have put forward, and it is the attempt to account for it that has led (to mention only very recent writers) McTaggart to deny that time (and change) exists, Dr. Broad to deny that the future exists, Mr. J. W. Dunne to postulate an infinite series of times and Mr. Macmurray to declare that it is only human activity that makes time. So my next task must be to examine the alleged difficulties in accounting for change on the theory which I advocate.

(ii.)

There are two sorts of change with which I must deal:—the changes of things *in* time, and the change *of* time of an event from being future through being present to being past.

Change in time.—Mr. Macmurray discusses the physical theory which analyses all changes of persistent things into changes of position, and he argues that such changes are not real changes at all. For he thinks that in a mere change of position there is nothing that has changed—not the object, nor the space, nor the position in space. But surely the object cannot be expected to change essentially, to change in those qualities which determine its identity; if it did this, it would

not be the same object, and so could not have changed. For to speak of an object changing between an earlier time and a later time requires that the object itself should exist at both times, and consequently that it should at both times have its essential qualities. But it can perfectly well change its inessential properties, *e.g.*, its position in space. Mr. Macmurray says that it is "only a verbal subterfuge" to say that an object has changed its position, since, although the object has occupied various positions, "it has changed none." But no one wishes to maintain that an object literally changes its position: what is meant by the phrase is that it changes *in* position, *i.e.*, that whereas at the earlier time it had certain spatial properties, at the later time it has different spatial properties. To say that an object O changes between a time T and a time T' is to say that O has some property at T which it has not got at T'. It seems to me that this is what we ordinarily mean by a thing's changing, so that the change is neither in the thing essentially nor in the properties, nor yet in the instants of time, but consists in the fact that a different relation holds between the thing and a certain property at one of the times than holds at the other time.

To state the matter in terms of events (for I should accept a metaphysic of events not unlike that of Professor Alexander, mentioned by Mr. Macmurray) the proposition that a thing O has a certain property P at a time T is to be analysed into the proposition that some event which has the property of being the state of O at time T has a property P' from which P is derived. And the change in the thing O with respect to the property P is equivalent to there being one event E which is the state of O at T, and another event E' which is the state of O at T', and one of these events having P' while the other has not P'. Here the change in O is analysed into the fact that events which are states of O have different properties. Mr. Macmurray would doubtless feel that this is "time disguised as sequence"—a

sequence of events which "give place to one another." But it seems to me that a sequence of different events which can be regarded as the states of one thing is just exactly what we mean by the change of the thing in time.

McTaggart (§ 316) compares such a temporal series of events (*e.g.*, the states of a poker on different days) with the spatial series of the points on the meridian of Greenwich. "We can find two points in this series, S and S', such that the proposition 'at S the meridian of Greenwich is within the United Kingdom' is true, while the proposition 'at S' the meridian of Greenwich is within the United Kingdom' is false. But no one would say that this gave us change. Why should we say so in the case of the other series?" McTaggart, with his habitual fairmindedness, supplies the answer in the very next sentence. "Of course there is a satisfactory answer if we are correct in speaking of the other series as a time-series. For where there is time, there is change." And, according to the view I am advocating, we are justified in calling some series time-series because we are directly acquainted with the fundamental temporal relation of succession.

Change of time.—Though we can explain the change of a persistent object as being the succession of events which are its states, and which have different properties, we cannot explain the change of the time of each of these events in this way. The change of Queen Anne at death can be treated in this way, but not the change of the death of Queen Anne from being future through being present to being past. This cannot be analysed into the succession of events which are the states of Queen Anne's death without an infinite regress, for these states would also change from being future through being present to being past. In consequence, a different solution must be found for the problem of change of time, and this is provided by the theory I have been advocating. According to this, the change of an

event from being future to being present consists in the fact that it has the relation of simultaneity to different events which are directly experienced and of which one succeeds the other. If the statements that the event is future and that the event is present are made by the same person, there is an analogy between my analysis of change *of* time and my analysis of change *in* time. If Bolingbroke had asserted that Queen Anne's body changed at death, on my view he asserted that there were two events which were the states of Queen Anne's body one of which succeeded the other, and that this latter event had some property which the former event lacked. If Bolingbroke had asserted that Queen Anne's death had changed from being future to being present, on my view he asserted that there were two events which were experienced by him one of which succeeded the other and that the latter event was simultaneous with Queen Anne's death, whereas the former preceded it. Thus, change in persistent objects is to be analysed into a succession of events which are the states of the object, change of the time of events into a succession of events which are experienced by one conscious mind. The specifically temporal element in each series of events is the relation of succession, which is directly experienced and has an intrinsic sense given in experience. I cannot see that there are any facts about change that are unaccounted for on this theory.

This theory makes the change of the time of events consist of a change in the experiences of an observer, and can in a sense be called a subjective change. Mr. Macmurray will doubtless think that this theory, like that of Professor Alexander, makes the distinction between past and future unreal; since "in some sense" it is "a relative distinction, depending upon a point of view. What from one point of view is past may from another point of view be future." This last proposition is surely merely the statement of an obvious fact, which must be

explained by any theory. And I see no reason why the fact that past and future are relative and relative to something that may perhaps be called subjective should be sufficient to deny their reality. When Mr. Macmurray goes on to say that, on some view like this, "from the philosopher's standpoint, *sub specie æternitatis*, the Real is one eternal present, and Time has disappeared," I cannot understand what other meaning can be given to the tag by a philosopher considering time. Surely, when Mr. Macmurray was writing his paper, he was contemplating the world *sub specie æternitatis* and outside time. And "from the philosopher's standpoint" it must be correct to say that "the Real does not change, though change takes place within it."

(iii.)

I have not discussed in this paper the particular theories of time put forward by Mr. Macmurray and by Dr. Broad because I have been concerned to show that the premiss upon which both of them base their arguments is invalid. This premiss is that there is some latent contradiction in time and change which can only be resolved by the adoption of a particular metaphysic. I have tried to show that there is no such contradiction if we adopt a relational view of the present, past and future; and that our knowledge of time is derived not from some subtle philosophy, but from direct experience. Sometimes in my paper I have expressed myself in language most appropriate to a natural philosophy of events, but I have no wish to imply that such a philosophy is necessary for the comprehension of time. Indeed, my contention is that the reality of time and change necessitate no particular philosophy; any metaphysic is compatible with them except one (like McTaggart's) which denies their reality. So for me there is no paradox or antinomy or riddle or logical problem about time.

The problems about time seem to me to be facts about time of which satisfactory explanations have not yet been found. Of these problems the following seem the most important :—

1. Why are only certain world-lines possible time-axes ?

2. Is every time-series an infinite series ? Or is recurrence to the same time possible ? The relation of succession appears to be asymmetrical and transitive, but this may be merely because our experience is so small. There seems no logical objection to a recurrence of time : we should then have to take succession within a short period of time instead of simple succession as the fundamental asymmetrical transitive relation from which time is derived, and we should have to re-define the past, for example, as earlier than the present within a definite period of time. Up to the present the finite worlds suggested by physicists like Einstein and De Sitter have been infinite along every possible time-axis and finite along every possible space-axis ; but the possibility must be admitted that the assumption of a world which is finite temporally might explain astronomical facts most satisfactorily.

3. Does the entropy of the world always increase with the time ? If so, why ?

4. What is the explanation of the fact that the time-series has an intrinsic sense given to experience ?

5. Why do we only remember the past ?

I have no solutions to offer to any of these problems, but I do not consider myself debarred from believing in the reality of time until I have solved them. Their explanations will be of the type with which we are familiar in science : they will be theories from which the facts follow and from which facts they derive a probability by induction. But they will not, I think, be demonstratively deducible from the facts ; and we shall not be compelled

to accept them by sheer force of logic in the manner in which Dr. Broad feels himself compelled to accept a theory which he obviously finds very unpalatable. We must, indeed, refuse to accept any theory which denies reality to time, but we need not be compelled to accept a theory on the ground that without it time is unreal. As philosophers we must take time seriously, but not too seriously.



III. *By* C. D. BROAD.

I WILL begin my contribution to this Symposium by making some comments on Mr. Macmurray's paper. In his first section he claims to prove that it is impossible that the world should merely endure without alteration. It must undergo real change. His argument for this conclusion is in two stages. He claims first to show that consciousness would be impossible unless there were real changes in the Subject. Consequently, if an unchanging world were possible at all, it would have to exclude consciousness altogether. He then claims to show that it is equally impossible that a world without consciousness, if it could exist at all, could exist without changing.

The first stage of the argument is that consciousness would be impossible without apprehension of differences, and that apprehension of differences would be impossible unless differentiation of attention were possible. And differentiation of attention, it is assumed, would be impossible unless the Subject could attend now to this and then to that, or could at one time attend more to this and at another time more to that. I see no reason to accept this argument. We must distinguish between *differentiation* and *fluctuation* of attention. Attention might surely be differentiated even if it never fluctuated. I might always attend to A and to B, and might always attend with a certain one intensity to A and with a certain other intensity to B. It is not clear to me that recognition of differences would need differentiation of attention, even in this sense. I see no reason why I should not clearly distinguish a green patch and a squeaky noise, even if they were the only objects of which I was aware, and if I attended equally and perpetually to both. But, even

if differentiation of attention were essential to recognition of difference, I cannot see why fluctuation of attention should be essential. And it is the necessity of *fluctuation* which Mr. Macmurray has to prove.

The second stage of the argument appears to be that in an unchanging world there could be no interaction, therefore no kind of determination, therefore no principle of differentiation; and therefore that such a world would be a mere non-entity. No doubt a world in which there was no differentiation would be a mere non-entity, as Hegel has taught us at infinite length. But I do not see that a world in which there was no principle of differentiation would necessarily be one in which there was no differentiation. *E.g.*, what is the objection to supposing that the world might have consisted of an unchanging blue circle for ever inside an unchanging red triangle? Such a world would be differentiated. But, so far as one can see, there would be no principle of differentiation, if this means an assignable reason why the circle should be blue and the triangle red and the former inside the latter. Again, even if determination of some kind were essential, why must it be causal determination? If causal determination be defined as the determination of one change by another change in accordance with a general law, it is of course, clear that there could not be causal determination in an unchanging world. But there seems no reason why there should not be laws of co-existence in such a world, as there are in the actual world; *e.g.*, laws analogous to the rule that the flowers of monocotyledonous plants have triadic symmetry. The only important difference in this respect between an unchanging world and one in which change can take place is an epistemic difference. In the actual world we try to discover which factors are, and which are not, relevant to the production of a given effect by repeating our experiments on successive occasions and varying the factors one by one on each occasion. Nothing analogous to

this would be possible in an unchanging world. Hence any alleged law of concomitance which an observer might formulate about such a world might well contain irrelevant factors. But this epistemic difference seems to have no bearing on Mr. Macmurray's argument.

I cannot then admit that Mr. Macmurray has given any valid reason for his belief that time involves change, if by "change" is meant change of things with respect to their non-temporal qualities and relations. Of course, it is possible that time involves change, in the sense of change of things or events in respect of their purely temporal qualities or relations. Even of a world which was unchanging in the first sense it might be said that it and all in it is continually "growing older," and thus changing in the second sense. And this might distinguish it from a world of timeless universals, such as Plato's Ideas. I shall return to this point later. But it seems clear that this is not what Mr. Macmurray has in mind when he asserts that time involves change.

The second section of Mr. Macmurray's paper is devoted to showing that certain kinds of alteration which have commonly been called "changes" would not be enough to constitute "real change." By noticing what kinds of alteration Mr. Macmurray refuses to count as "real changes," we find, so far as I can see, that a "real change" must have the following characteristics. (1) It must be a change of intrinsic quality, and not merely of relational property. This seems to be the only ground for refusing to count mere change of spatial position as real change. When a body moves, there quite clearly is a change in its *relations*—to other bodies, on the Relationist view, and to points of Absolute Space, on the Absolutist view. (2) A quality must be manifested which has never been manifested before. This seems to be the only ground for refusing to count cyclic processes as real changes. (3) The manifestation of the new quality must,

in some sense which I do not clearly understand, be rationally explicable from what has gone before. This seems to be the only ground for denying that the theory of Emergence, if true, would involve "real change."

This part of the paper seems to me to be purely verbal. I cannot detect any reason, either in the facts themselves or in Mr. Macmurray's paper, why a world could not have existed in which there was change only of those kinds which he refuses to call "real change." In a world which consisted simply of qualitatively unchanging particles altering their mutual spatial relations by impact or gravitational attraction, there would be differentiation, and there would be causal determination. That the world in which we live is not of this simple kind I readily admit. But what Mr. Macmurray needs to prove is, not that such a world is not actual, but that it is not possible. And this, so far as I can see, remains completely unproven.

It is now high time for me to cease criticizing, and to say something positive for myself about time and change. I will begin by asking what kinds of term are changeable, and what, if any, are changeless. And I will consider the different senses in which different kinds of changeable term can be said to change. There are three kinds of term to be dealt with, viz., universals, events, and things. It would commonly be said that universals are unchangeable; that events can change only in respect of their temporal characteristics, but that in this respect they constantly and necessarily change; and that things can, but need not, change in respect of their non-temporal qualities and relations, whilst they necessarily and constantly change in respect of certain temporal characteristics. *E.g.*, the number 2 is eternally even and between 3 and 1; the Battle of Hastings cannot change in any respect, except that of constantly receding into the more and more remote past, though it necessarily changes in that respect; whilst my table may or may not alter its

non-temporal qualities or relations within the next five minutes, but will necessarily be growing continually older.

CHANGE OF UNIVERSALS.

Let us consider the three cases in turn. (1) It is certainly untrue that universals are unchangeable in *all* respects. There are two, and, so far as I can see, only two respects in which they can and often do change. (a) The first fundamental respect in which a universal can change is in its relation to cognitive beings. The number 2 is sometimes an object of Smith's mind and not of Brown's, sometimes an object of Brown's mind and not of Smith's, and sometimes perhaps an object of no mind. (b) The second fundamental respect in which a universal can change is in respect to the particulars which it qualifies or relates. The characteristic of *dodo*-hood once applied to many particulars, and it now applies to none. The characteristic of *fly*-hood applies to millions of particulars in England in summer, and to few or none in winter. I think we may say that no universal can change in any respect which is not or does not involve either of these two variable relations to particulars. If universals have any intrinsic qualities, then it is nonsense to suggest that they could change in respect of these. And it is nonsense to suggest that any universal could change in respect of any relation to another universal which did not involve one of these two relations to a particular. When I think of red and of green, there does, of course, subsist between these two universals, the relation of being both thought of together by me. And this relation may cease to hold in course of time. But it is a derivative relation, compounded of certain relations of these two universals to a certain particular. Whenever we consider a relation between universals which is not, in this sense, derivative, *e.g.*, the relation of between which 3 has to 2 and 4, we see clearly that it is unchangeable.

OCCURRENCES AMONG PARTICULARS.

(2) I pass now to changes of particulars. And I will begin with those changes which do not consist simply in the receding of an event into the more and more distant past or in the growing older of a thing. The changes which I am now to consider I will call "occurrences." Now, *prima facie*, it seems necessary to recognize the possibility of two fundamentally different kinds of occurrence. These might be called respectively "alteration" and "generation-or-annihilation." (a) Alteration takes place when a pre-existing particular which has been characterized by a certain universal ceases to be characterized by it and becomes characterized by another universal. It also takes place when a pre-existing particular continues to be characterized by the same determinable universal, *e.g.*, colour, but ceases to be characterized by a certain determinate form of it, *e.g.*, redness, and begins to be characterized by another determinate form of it, *e.g.*, blueness. (b) Generation takes place when a particular which had not previously existed comes into existence. Annihilation takes place when a particular which had previously existed goes out of existence. I think we may assume that no particular could exist for an instant without having some quality or standing in some relation to other particulars. So generation as well as alteration would involve a change in some universal. In both cases a certain universal begins to characterize a certain particular which it did not characterize immediately before. In alteration, this particular existed before and was characterized by *some* universal, though not by *this* one. In generation this particular did not exist before, and therefore was not characterized by *any* universal.

Now it is natural that men should have tried to simplify matters by getting rid either of alteration or of generation-and-annihilation. I will now consider the main ways in which such attempts at simplification have been made. (a) Those who have

wished to get rid of generation and annihilation have made the fundamental particulars either to be timeless or else to endure throughout the whole of time. Theories of this type have taken two radically different forms, viz., a pluralistic and a monistic one. (i) According to the pluralistic form there is a number of independent fundamental particulars, each of which endures throughout the whole of time. These can enter into and go out of various relations with each other from time to time. The appearance of generation and annihilation is then explained as follows. At a certain time a number of the fundamental particulars enter into certain characteristic relations with each other. The complex whole thus formed persists for a time, either through the same fundamental particulars remaining in the same mutual relations, or through their being gradually replaced by others which enter into the same relations with those that remain. In this way we have the appearance of generation, although really there is nothing but alteration. It is only complex particulars which are "generated" or "annihilated," and their "generation" or "annihilation" is really only an alteration in the relations of the fundamental particulars.

(ii) According to the monistic form of the theory there is a single fundamental timeless particular, viz., Absolute Space, in the substantival Newtonian sense. Finite particulars are simply finite regions of this Space. It follows at once, not only that no particular can begin or cease to exist, but also that no finite particular can change its spatial relations to any other. Consequently, on this form of the theory, no particular can move; whereas, on the first form of the theory, finite particulars can and do move. What is called "motion" is now just the successive pervasion of a continuous series of geometrically similar regions, either by the same determinate quality or by a continuous series of different determinate values of a single determinable quality. What is called "generation" would consist

in the fact that a certain region, which had not been pervaded by any quality, now begins to be pervaded by some quality, whilst it is bounded on all sides by a region which continues to be unpervaded by any quality.

I will criticize these attempts to dispense with generation before stating the alternative type of theory which attempts to dispense with alteration. In the first place, I see no *a priori* objection to the notion of timeless particulars or of particulars which endure throughout the whole of time. On the other hand, I cannot see directly that the fundamental particulars *must* be incapable of generation and annihilation. As between the pluralistic and the monistic forms of the present theory I definitely prefer the former. I do not know of any objection to the pluralistic form which does not apply equally to the monistic form. And there seem to be two objections to the monistic form which do not apply to the pluralistic one. First, even if we confine ourselves to physical things and events, the assumption of Absolute Space, in the substantival Newtonian sense, is much less plausible than the Relational Theory or the adjectival form of the Absolute Theory. It is surely an assumption to be avoided unless we are positively forced to make it. Secondly, we cannot of course confine ourselves to physical things and events, since the actual world obviously contains things and events which, whether they be physical or not, are certainly also mental. Now I do not see how the monistic form of the theory can deal with mental things and events at all. I cannot attach any meaning to the statement that a mental event consists of the pervasion of a certain region of Absolute Space by a certain mental quality throughout a certain period.

It might perhaps be objected that the pluralistic form of the theory involves the view that every mind persists throughout the whole of time, and that this is as serious a liability as the doctrine of Absolute Space which burdens the monistic form.

This objection, however, rests on the tacit identification of each mind that we know with one of the fundamental particulars of the theory. Now there is no need for this identification. All the minds that we know may be very complex wholes composed of certain fundamental particulars, suitably interrelated. If so, it is no more necessary that each mind should last throughout the whole of time than that each body should do so.

(b) We can now consider the type of theory which tries to dispense altogether with alteration and to manage with nothing but generation and annihilation. On this view the fundamental kind of occurrence is the generation of particulars which did not previously exist, and their subsequent annihilation. Each particular is generated with some determinate quality and in some determinate relation to other particulars which already exist. If there is to be no alteration, each particular, once generated, must continue to be characterized by precisely the same determinate form of the same determinable quality until it is annihilated. Could we allow a particular to change in respect of its relational properties during its existence? I think the theory could allow this in one sense but not in another. We could allow a particular to lose a relational property through the annihilation of another particular during its existence, and we could allow it to gain a relational property through the generation of another particular during its existence. But we could not allow it to alter any of its relations to any already existing particular; for this would be mere alteration, which the present theory seeks to avoid.

On this type of theory, as on the monistic form of the first type of theory, no particular ever literally moves. What is called "motion" will be the generation and annihilation of a series of successive particulars, identical with or similar to each other in their non-positional characteristics, and forming a series in respect of their positional characteristics. How will the theory deal with cases of apparent alteration? Instead of saying that a certain

particular x was characterized by q_1 up to a certain moment and by q_2 after that moment, it will have to deal with the situation as follows. It will say that at a certain moment a particular x_1 , characterized by q_1 , was annihilated, and at the same moment another particular x_2 , characterized by q_2 and having certain specific kinds of resemblance to x_1 , was generated.

Is there any conclusive objection to such a theory as this? I cannot at present see that there is. It is true that I find it easier to think of the alteration of pre-existing particulars in respect of their qualities and relations than to think of the generation and annihilation of particulars complete with qualities and relations which cannot alter in the course of their history. But this may be merely through the former notion being more familiar to me than the latter. There is indeed one difficulty which strikes me at first sight. If there be genuinely continuous change either of position or of any non-positional quality, there will, on the present theory, have to be literally instantaneous particulars. Now the notion of an existent which has temporal position but no duration produces on me the same impression of artificiality as the notion of Absolute Space in the substantial Newtonian sense. Possibly this is a mere prejudice. But, even if it be not so, I doubt if the above objection is really fatal. For it does not seem necessary to admit that there really is continuous change. It is plain that there could never be conclusive empirical evidence for it, since we know that discontinuous change, if quick enough, presents the appearance of sensible continuity. And I do not know of any argument by which it could be proved that there must be continuous changes.

I may sum up this part of my paper as follows. Among possible occurrences we can in theory distinguish between the generation or annihilation of particulars and the qualitative alteration of pre-existing particulars. It may be that there really are both kinds of occurrence. But it seems possible to

save all the appearances by supposing either that all occurrences are of the first kind, or that they are all of the second kind. On the first supposition every ultimate particular is an Occurrent, which has been generated and will be annihilated, but which cannot alter any of its qualities, and can alter its relational properties only in a certain very restricted sense which has been explained above. On the second supposition every ultimate particular is a Continuant, which can never be generated or annihilated in the course of time, but which can alter its qualities and its relational properties from time to time. A variant of the second supposition, which would make every ultimate particular to be a region of Absolute Space, was rejected as being incompatible with the existence of mental things and events.

CHANGES OF TEMPORAL CHARACTERISTICS.

(3) I pass now to those changes of particulars which are not occurrences. These are of two kinds. There is the change of an event from being future, through being present, to being past, and its gradual retreat into the more and more remote past. And there is the steady ageing of things which already exist and go on existing. This is the part of the problem with which Mr. Braithwaite's paper is mainly concerned, and I must now say something about his views.

I agree with him that we know by acquaintance, in favourable cases, the relations of simultaneity and succession, and that we can see by direct inspection that the latter relation is asymmetrical. In this connexion Mr. Braithwaite says a good deal about the specious present. I am not sure of its precise relevance, and I will therefore state very briefly what I think about it.

In the first place I do not understand Mr. Braithwaite's definition of a "momentary total experience." But the essential point in the doctrine of the specious present may, I think, be stated as follows. There is a certain characteristic which an object may

have at certain times. This may be called the characteristic of "being sensuously presented." This characteristic has various determinate forms which may be called "degrees of vividness." The facts about the finite duration of the specious present may now be stated in the two following correlative propositions. (a) A momentary event, occurring at a time t , can be sensuously presented throughout the whole course of an experience which begins at t and lasts for a time T . It is presented with steadily decreasing vividness in each successive later slice of this experience. (b) In a momentary experience, occurring at a time t , the whole course of an event which ends at t and began at $t-T$ can be sensuously presented. Each successive earlier slice of this event is presented with less vividness in the momentary experience. I have no doubt that, by a little manipulation of the kind which Whitehead has made familiar, we could get rid of the notions of momentary events and momentary experiences in these two statements.

Now, supposing that this, or something like it, is what is meant by the doctrine of the specious present, what bearing has it on our present problem? I think it is introduced by Mr. Braithwaite primarily in order to show how we can be directly acquainted with the relation of before and after. I am not sure that it is essential even for this purpose. Provided we were directly acquainted at the same moment with events which stood in the relation of before and after it would not matter whether the earlier events were *sensuously* presented to us or not. *E.g.*, if memory were direct acquaintance with past events, it would suffice to make us acquainted with the relation of before and after in spite of the fact that remembered events are not *sensuously* presented.

I do not think that the finite duration of the specious present has any other bearing on the questions which we are discussing. In particular, I do not think that Mr. Braithwaite's solution of the difficulties which McTaggart raised about past, present,

and future depends at all on the finite duration of the specious present. The essence of Mr. Braithwaite's solution, stated in its simplest terms, seems to be as follows. Suppose I look out of the window, and say: "It is now raining." I intend to convey that rain is falling simultaneously with this statement that it is doing so. If I made a verbally similar statement on another occasion, I should intend to convey that rain was falling simultaneously with *that* statement. The second statement is another particular different from the first, though of the same form. Each statement is an object of direct acquaintance to me and to my hearer when it is made, and so in practice there is no ambiguity. I accept this type of solution of the difficulty which McTaggart raised.

But there is a positive as well as a negative side to McTaggart's doctrine of time. The positive part of his doctrine may be stated in two propositions. (a) The notions of past, present, and future are essential to time and are not analysable into other notions. (b) The notion of before and after involves the notion of past, present, and future. It is evident that either or both of these propositions might be true, even if the negative doctrine that every event would have to be past, present, and future, and that this would involve a contradiction, were rejected. Now, it does not seem to me that Mr. Braithwaite's solution of McTaggart's difficulty refutes the positive side of McTaggart's doctrine. If I say that it is now raining, I mean that rain is occurring simultaneously with my *present* statement. This statement is marked off from all other statements that I may make of the same form, simply because it is present, whilst they are past or future. Mr. Braithwaite's appeal from "now" to "this" does not help us. Certainly, "this" has the same kind of systematic ambiguity as "now." But by "this" I mean "what I am *now* perceiving or thinking about or referring to," and so "this" cannot properly be used to explain "now."

I feel in my bones that Mr. Braithwaite's theory of past, present, and future misses out something that is essential. And yet I must confess that I cannot state clearly to my own satisfaction exactly what it lacks. But, at the risk of talking nonsense, I will say this. Granted that there is a certain series of mental events which can be called "my experiences," then it seems to me that at any moment there is one of these which has a certain characteristic which some of them "have had and no longer have" and which the rest of them "will have but have not yet had." And I do not see how this can be accounted for, as I understand Mr. Braithwaite claims to do, by the unchanging relations between two series of unchanging events, one subjective and the other objective.

It still seems to me that, in spite of the difficulties that have been alleged against it, the view that new events literally "come into existence" and add themselves on to those which already exist is the one that does most justice to the facts. On this view, the present is the last slice that has been added to the sum-total of the existent; the past is what once had no successors, but now has successors owing to the sum-total of existence having increased by further becoming; and the future does not exist at all. I stated this doctrine in a rather confused manner in my *Scientific Thought*, introducing it as a way of avoiding McTaggart's difficulties. I am now by no means certain that it is either necessary or sufficient for the purpose of avoiding these difficulties. But I still wish to put it forward on its own merits; and I think that I could answer the objections which McTaggart has made to it in Vol. II of his *Nature of Existence*, though I have no doubt that he has pointed out real defects in my account of the theory. But this is neither the time nor the place to go into these matters.

SYMPOSIUM: THE NATURE OF THE SELF AND OF SELF-CONSCIOUSNESS.

By PROFESSOR G. DAWES HICKS, PROFESSOR J. LAIRD AND
MR. ALAN DORWARD.

I. *By* G. DAWES HICKS.

THIS symposium may be regarded as a kind of sequel to the discussion on the nature of introspection in which we were engaged last year, and the subject of it was, I take it, suggested thereby. For, in trying to determine the character of introspection, it very soon became apparent that we were being constantly brought up against the more fundamental issue; and, in point of fact, each of the three contributors to that discussion found himself constrained to indicate to some extent the position he occupied in regard to the problem now before us.

Before entering upon the thorny question of the nature of the self, I will say something about the nature of self-consciousness, because it is, I think, from the latter that any profitable consideration of the former topic must start. And I will begin by re-asserting one of the results of our previous discussion upon which all who took part in it were agreed,—this, namely, that, as a matter of fact, the experiences which we attribute to the self, such as seeing and hearing, desiring and willing, cannot be cognized except in correlation with a not-self which in and through the same act is likewise cognized. We are aware of our seeing primarily in being aware of (say) a colour, of our hearing in being aware of a sound, of our willing in being aware of something willed. As Professor Stout put it, “it is utterly wrong to suppose that we can, so to speak, turn our backs on other things and

direct our gaze on our own states and activities so as to contemplate these by themselves apart from their objects." In other words, the objects upon which our subjective processes are directed enter inevitably into all introspective judgments. And conversely, in cognizing an object we are never wholly incognizant of the subjective process in relation to it, vague and indistinct though the latter cognition may be.

This is virtually the position that was fundamental in the Kantian theory of knowledge, and I can perhaps best get under way by referring very briefly to certain features of the Kantian theory upon which usually too little stress is laid. So far as he can be said to have offered an analysis of the process of perception, Kant appears to have regarded it as involving (a) a chaotic manifold of disconnected sense-data, chaotic even though there be assigned to it arrangement in the forms of space and time; (b) the mechanism of revival or reproduction, the function of which was to bring together, in accordance with the way in which they had been originally given, the parts of the presented material; and (c) the operation of thought, by means of which the contrasted factors, subject and object, were correlatively determined. On the one side, on the side of the object, thought provided that which "prevents our presentations from coming to us at random or capriciously," and was the ground of that orderliness and uniformity which constituted the contrast between merely chaotic sense-data and objective fact. On the other side, on the side of the subject, it exhibited the aspect of unity and represented somehow a centre of reference for a manifold, thus pointing directly to the unity of consciousness. And ultimately, Kant conceived that he had found in this notion of the unity of consciousness the solution of the problem which the former side of the correlation suggested the determining influence, namely, of the object on the isolated data of sense-intuition. Accordingly, the whole burden of accounting for the

possibility of knowledge or experience was thrown upon what seems on the surface at any rate to be a merely formal unity---that of self-consciousness.

In reference to this result, two questions may at once be raised. (*a*) Is it not evident, on Kant's own showing, that the formal unity of self-consciousness is determined by what really belongs to the material of experience? Kant, it is true, described the merely formal unity as analytical; but he proceeded to argue that it is realized in experience only in and through synthesis or combination of the given elements. But what can be understood by a synthetical unity except a unity the terms of which are not deducible from the bare unity of the self, but are given? These synthetical unities--for there were several of them--were, in fact, the schematized categories, the modes of combination of the material in space and time, the general structure of which made up the objective system. And it is obvious that they were arrived at by reflexion upon that highly elaborate type of experience which is exemplified in scientific knowledge. That in such knowledge unity of consciousness *is* realized may certainly be admitted; yet, in saying that, we have really been assigning the first place not to the unity of self-consciousness but to the orderly character of the given material. (*b*) Are we, then, justified in ascribing to the self, or the unity of consciousness, the independent and substantive character which, at least along certain trends of reflexion, Kant was inclined to do? Nothing can, I take it, be more certain than that, from a psychological point of view, we are driven to conceive of the unity of self-consciousness not as a primordial datum, but as a factor of experience that has come to be what it is in consequence of the change and development which have characterized experience as a whole. Seeing that the generalized form of scientific knowledge cannot be supposed to be in any way present in more primitive stages of experience, the natural conclusion would seem to be

that neither could there be present in them its correlate, the self and its unity. Doubtless, when we have regard to a mature mind—a mind that distinguishes itself from its surroundings and is aware of its own unity—we *are* prone to assume that, since for such a mind recognition of the contrast between subject and object is fundamental, it must be regarded as involved in all conscious experience. Nevertheless, scrutiny of Kant's own argument is sufficient to awaken misgivings as to the legitimacy of such an assumption. He attributed the establishment of the contrast to an unique act of spontaneity or thought. And so much may be granted, that, since what is ordinarily called thinking is always based upon the contrast in question, thinking in this sense may reasonably enough be said to make its appearance along with the said contrast. It is, however, altogether another matter to postulate as present from the start a "self" endowed with a whole armoury of thought-categories and capable of responding to what is presented to it with the forms of connectedness that render experience possible. So far from viewing the texture of experience as being inexplicable except by reference to a "self" thus organized and equipped, we are constrained on psychological grounds to reverse the procedure and to acknowledge that only gradually does thought, so conceived, and along with it recognition of the subject-object relation come to be,—in brief, that instead of experience being the product of the "self," the "self" is rather the product of experience.

I should maintain, then, that thought or thinking, in the usual acceptation of the term, becomes possible only after there have been established in experience constant conjunctions among the parts of what is directly presented; and that, so far from such conjunction of parts being explicable by reference to the "unity of self" as its ground or cause, the unity of self is a derivative fact, a consequence of the gradual establishment or recognition of a constant connexion of parts in the originally given material.

If we seek for a more primitive unity that would serve as a point of departure for the subsequent development, we shall find it, I believe, in that feature of consciousness which would appear to be, from a psychological point of view, indispensable,—namely, that its field is always complex or manifold. A conscious experience reduced to a single content is, psychologically regarded at any rate, an inconceivability. So far as can be made out from indirect evidence, rudimentary mental lives differ widely in respect of the capacity of being simultaneously aware of the elements of a manifold. And advance towards self-consciousness will depend mainly on the possibility of increasing the complexity of what can be grasped in and through one and the same state of awareness. Beyond question an essential condition of such possibility is increase in the facility of retaining or reviving the contents of previous states of consciousness. Where little is retained in the form of “ideas,” where a state of mind is chiefly confined to momentary presentations, there unity of consciousness will be at a minimum. Similarly with regard to continuity; it too, must ultimately depend upon features in the contents of actually present experience. No conscious subject is in a position to be an onlooker at the flow in time of his own mental life; its continuity cannot, therefore, have for him the significance it would bear for a hypothetical external spectator. For the latter, indeed, the periodical occurrences of dreamless sleep or the special occurrence of so-called “unconsciousness” would appear as gaps or pauses in the flow of mental process, and without postulating certain hypothetical entities to span these breaks in the sequence of its states he would be compelled to deny that a conscious subject is a continuant. For the former, on the other hand, continuity depends upon certain features of his present experience, particularly of “ideas,”—namely, that the contents of “ideas” imply a reference to the past and also to the future. Just in proportion to the extent to which the natural conditions

of the mental life provide means for the supply of such ideas and the attainment of this reference beyond themselves will be the kind and amount of continuity characterizing it.

It is truer, then, to say that retentiveness is a pre-condition of any continuous inner life than that a continuous inner life is a precondition of retentiveness. Not even the most rudimentary consciousness of self could arise until there had been to some extent developed, what is in part a consequence of retentiveness, (a) recognition of the difference between present experience and represented past experience, and (b) recognition of the relatedness of the one to the other. In trying to determine the circumstances which might originally have led to this recognition, a main consideration that should guide us is, I think, that rudimentary experience would not consist of sharply differentiated presentations such as those with which we, in our mature experience, are familiar. For us each presentation stands more or less definitely marked off from others, and the act of relating it to those others *seems* to be an additional and super-induced process carried out by ourselves. But in the rudimentary stages presentations would be vague and confused; they would scarcely exhibit any of the features that enable us readily to distinguish a present content from its antecedents and consequents. Accordingly, explanation of the earliest recognition of a distinction between present and past must be sought not in the objective features of presentations which enable us to discriminate a present moment from preceding moments, but rather in certain characteristic differences of feeling-tone. I should suppose that in the earlier stages recognition of the difference between present and past turns pre-eminently upon the difference between the feeling-tone accompanying satisfied and that accompanying unsatisfied desire. Not that this alone would suffice; but the experienced differences in the way of feeling would naturally become associated with the presented contents that normally accompany them, and so the transition from the

one to the other would gradually evince itself. Originally the "self" would be little else than a relatively enduring centre of feeling; and those psychologists seem to me to be on the right lines who discern in the contrast between the extendedness characterizing certain contents of sense-experience and the non-extendedness characterizing the element of feeling, the basis from which, on the one hand, our elaborate notion of the external world and, on the other hand, our mature consciousness of self have been developed. In the earliest stage of all, tactual presentations and the motor experiences associated with them would be the predominant factors; and I should point to the consciousness of resistance to bodily movement as the primordial form of awareness of what we call material reality. Experience of the external would be experience of the extended resisting. Moreover, it has to be noted that the characteristic bodily experiences are those which accompany the execution of movement; and that, as being relatively constant, they come to be contrasted with the variable experiences of that which offers resistance to such movements. Hence, the body acquires the special position it occupies in our experience as sharing equally in the subjective and objective. It comes to be regarded as, on the one hand, the seat of spontaneous activity and feeling; it comes to be regarded, on the other hand, as being of like nature with that which resists its movements. And I agree with what Professor Stout emphasized so strongly in the discussion of last year that even in our mature experience the self of self-consciousness is an embodied self, that what we ordinarily mean by the word "I" includes in inseparable unity a bodily and a mental factor.

The self of self-consciousness, pictured as the animated body or organism, involves just those further developments of ideation, memory and expectation which, in course of time, enable the individual to arrive at the stage of definitely opposing to the whole range of spatially related objects the inner or

subjective life as that which is merely brought into special relations with the world of spatially related things. The individual comes to regard the "self," of which he is conscious, as persisting, and the several processes of perceiving, remembering, desiring, etc., as its transitory modes or modifications. In these later stages of the development certainly no more important factor can be singled out than the exercise of purposive or directed activity. It would scarcely be an exaggeration to assert that the pre-eminently individualizing factor in the inner life is that which we designate as conation or striving. And parallel with the development of this practical activity, in and through which the individual is at once related to and marked off from the external world, there proceeds the development of the reflective or discursive activity, the activity it is customary to call thinking. It is essentially as thinking and willing that the individual comes ultimately to speak of himself as "I," and to be self-conscious in the sense of recognizing the identity of the subject who is aware of reflexion and practical activity with the subject who is at the same time reflecting and acting. I make no doubt that recognition of our own individual inner life is immensely facilitated by, and would never acquire the definite meaning it has, except in and through the recognition of other similarly constituted individuals. But I cannot accept Ward's view that the interpretation of perceiving as an internal state referring to an independent object is posterior to the recognition of other percipient subjects. On the contrary, it seems to me clear that the determination that the other subject perceives, or has experience qualitatively similar to our own, is possible only in so far as we have effected for ourselves the distinction between perceiving as an internal state and the perceived object as relatively independent thereof.

If, now, it be a fact that mental life does not start with being self-conscious, if it gradually attains to self-consciousness,

and if self-consciousness passes through numerous phases, such as I have been trying to indicate, can the contention be sustained that the "self" of which we thus become aware is an entity which has all along been there, although in its primitive stages it was unaware of itself and in its earlier subsequent stages only dimly and confusedly aware? I am bound to answer that I do not think it can. The self of self-consciousness is obviously no mere abstraction; it has no reality apart from the contents of which it consists. It implies doubtless a certain contradistinction from nature, but then, as I have been urging, it only knows itself in and through knowing a natural world that is other than itself. And the knowing cannot be arbitrarily severed from that which is known. Perhaps this is a clumsy way of expressing what I mean. I am not intending to say with Bosanquet that the content of nature is the content of mind, or with William James that, in its widest sense, "a man's self is the sum total of all that he can call his, not only his body and his psychic powers, but his clothes and his house, his wife and children, his ancestors and friends," etc., etc. Language of this sort I regard as woefully misleading. What Bosanquet designated "the world of the self" does not, as such, enter into the self at all. An object of mind seems to me, at any rate, wrongly described as a constituent of mind; it is rather the awareness of the object that should be thus described. The self of self-consciousness is largely composed of such awarenesses; at any moment, it is, so to speak, an "organized whole" of specific awarenesses, which are not its object, but, if you will, its "structure." No doubt, an awareness implies an "act" of being aware; but the "act" is not one thing and the awareness another, they are inseparable aspects of one and the same reality. Now, I can discover no warrant for the supposition that common to the states of awareness of what we call an individual mental life there is a particular existent which is one and identical in

all of them. From the unity and identity of the self of self-consciousness we cannot legitimately infer the unity and identity of an existent entity as the ground of the former. To do that, we should need, at least, some additional premiss. It might be argued—it has, indeed, been argued—that retentiveness is inexplicable without such a supposition. Not only, however, is this negative argument excessively precarious in itself, but it cannot be shown that the supposition helps in any way to explain the fact of retentiveness. Or, again, were the unity and identity of an object cognized dependent, as Kant maintained, upon a synthetic act of consciousness, there might be some justification for taking the step in question, although it is more than doubtful whether Kant himself really took it. But if that position be ill-founded, and I have indicated why I think it is, then it becomes possible to discern in the unity and identity of the object cognized the ground of the unity and identity of the act of cognizing it. In taking, for instance, half a dozen glances at a strange and curious flower, so that its various details, at first obscurely and confusedly apprehended, gradually become clear and distinct, the act of apprehension may be said to be one and identical in so far as the object upon which it is directed is one and identical, and it is hard to see how it could be said to be so otherwise. So, too, in the case of volition. In willing to bring about a certain change in a particular group of circumstances, the act of will may be said to be one and identical in so far as there is awareness of that one group of circumstances in which the change is being effected.

Throughout, then, it seems to me to be connectedness in what is known and felt and willed that is essentially involved in referring, as at the stage of mature self-consciousness we do refer, our various experiences to one and identical self. And I cannot see that any light is thrown upon the nature of unity of consciousness as a condition of knowledge, by assimilating it in some way

to an exercise of energy on the part of an agent behind the scene, an exercise which it is futile to attempt to render intelligible in terms of objective fact, and which consequently must, from that point of view, evince itself as a merely blank form of synthesis. Even though one speaks of each cognitive act as "holding together" the elements of its own content and as thus supplying for them a bond of union, the question as to what it is that "holds together" different cognitive acts with different contents would be no nearer solution. In short, the synthesis of the elements of content in one cognitive act is in no way comparable with the permanence, in successive cognitive acts, of one entity as a continuous existent.

It is, I take it, obvious that what we mean by the "self" of self-consciousness is not merely the stream of psychical "acts" or occurrences, even though it be true, as I think it is, that these do not float about loosely, but are united in such a way that the whole they constitute could not conceivably be formed by taking them separately and then combining them. But when we come to inquire into the nature of psychical events, *quâ* events, the question is at once forced to the front whether we are not still too much under the sway of the old Cartesian tradition of looking upon the bodily life and the mental life as belonging to two disparate realms of existence which are somehow brought into connexion. Even Bradley, who, in one sense, rejects the view that the neural series and the psychical series proceed side by side and independently, and who maintains that no *mere* psychical sequence is a fact, or in any way exists, yet appears to say that with each member of the psychical series there is "conjoined" a physical event, and to imply that the "double event," as he calls it, is made up of two single events, the one physical and the other psychical. Yet, even on such psychological grounds as those which Professor Stout emphasized in the discussion of last year, one might well ask whether in point of fact we ever do

apprehend the psychical as a series of distinct events at all, whether, in other words, that mode of describing the mental life which attributes to it a position as an existent distinct from and other than the corporeal is not an erroneous interpretation of what in so-called introspection we are actually aware of.

Empirical evidence there is in abundance for affirming that acts or states of consciousness are invariably in closest dependence on physical process of some kind. Of physical process in the concrete we really know very little. We tend to represent physical process to ourselves in the light of the abstractions which for the purposes of scientific treatment are both legitimate and necessary. On a purely mechanical theory, abstraction is made of qualitative characteristics and physical process is interpreted in quantitative terms. Moreover, according to that "bifurcation of nature," which dates from the ancient atomists and which until recently was tacitly assumed by most physicists, the distinction between subjective and objective corresponded to that between qualitative and quantitative, and this led to the further supposition that differences of a qualitative kind might be explained by reference to variations in what was essentially quantitative. But even the earliest critics of the doctrine pointed out that at least the term "explanation" was inappropriate, that if the qualitative was to be assigned to the subjective sphere and excluded from the objective and quantitative, then, at best, so-called "explanation" could only amount to correlating variations of the one type with variations of the other. In a well-known chapter of his *Logic*, Mill makes use of the peculiar character of qualitative distinctions as a means of determining the limits to that kind of explanation which consists in resolving subordinate laws that are more complex into laws of greater simplicity and generality. Since qualitative differences are certainly exhibited in the region of perceptive experience, the apparent breach of continuity, discernible in the attempts at "explanation" to which Mill

refers, deepens, if it does not occasion, the impression of a total want of connectedness, of absolute heterogeneity, as between the psychical and the physical. Little reflection, however, is needed in order to see that there can be in the concrete whole of nature no existents corresponding to the abstracta of mechanical theory. Quite clearly physical process is not exhausted in what can be expressed in quantitative terms. It has, and is bound to have, its own structure and collocation of parts. You may divest the parts of every shred of qualitative distinctness, reducing them to what can be expressed in quantitative terms, and likewise each collocation, each total distribution, may exhibit both internal coherence, as having its relations expressible quantitatively, and external intelligibility, as being connected with prior distribution ; but, however far you push your analysis in this direction, there will be, as Mill recognized, a residuum, a remainder, which will prove irreducible. A limit, then, to this kind of " explanation " must, even on the basis of the old " bifurcation " doctrine, be acknowledged ; and such a result is in itself sufficient to cast discredit on that doctrine.

There is, at least, nothing in what we apprehend as physical to suggest the heterogeneousness which the " bifurcation " in question implies. Everywhere in nature we find qualitative features characterizing certain complexes which may, from one point of view, be regarded as susceptible of purely mathematical treatment. It seems to me, therefore, far from being unreasonable to conceive of a highly intricate configuration of physical elements, such as we find in the cerebral system, as being characterized by those features which reveal themselves in what we call modes of consciousness. Is there, in truth, any more difficulty in supposing that the consciousness of blue characterizes a certain configuration of physical elements than in supposing that the colour blue characterizes another such configuration ? In neither case would the statement imply that the characteristic in question

is either identical with or caused by these elements. In both cases we should, it is true, find ourselves at length brought to a stand before a similar *impasse*. We are not, namely, in a position of being able to offer any adequate analysis of what is involved in the relation denoted by the term "characterizing." But that is an obstacle confronting us at every turn, and is no more of an obstacle in this particular connexion than in any other. Lotze stigmatized as a prejudice the supposition that the function of consciousness is merely to mirror in its own inexplicable way the course of reality, and what I am suggesting is that the severance from which that prejudice takes its rise is without philosophical or psychological foundation. We seem rather driven to regard the changes which together make up the mental life of the individual as being themselves part of the real process of existence, and as inextricably bound up with what we describe (relatively and by an abstraction of our own) as the mechanical.

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II. *By J. LAIRD.*

I HAVE had to write this paper in ignorance of what Mr. Hicks has to say, and therefore run the risk of interpreting the main subject of our discussion in a fashion somewhat different from his. Indeed, the official title is very wide. Since the bias of the title, however, seems to be towards epistemology, I propose to offer an abstract and partial analysis of certain characteristics of self-cognition with the faint hope (although scarcely with the expectation) of advancing some little way towards a tenable account of the self.

It is necessary for me at the outset to indicate the significance of certain terms which I intend to employ technically in the discussion. These are: *æstheta*, *noeta* and *epidoxasta*. By an *æstheton* I mean any portion of existence which reveals itself immediately, and (so far as we can tell) fully, to some process of inspection. By *noeta*, on the other hand, I mean universals, not matter of fact, which are directly apprehended by mere intellectual process. *Epidoxasta* (I am borrowing the term on trust) seem to imply both noetic and æsthetic process, but I propose to define them simply as the entities which *require* one or more *æstheta* as part of the evidence for their existence but are not themselves *mere æstheta* in any ordinary sense.

I do not suppose that these terms, if they are taken seriously, will escape everyone's challenge, but I should like to explain that I wish, so far as possible, to avoid any peculiar or question-begging theories in my use of them. The principal difficulty, I suppose, concerns the class of *epidoxasta*; and with regard to this class—the "thing" of common sense is an example—I have been careful to avoid saying that *epidoxasta* are either

constructed or inferred from *æstheta*, and I have not intended to deny that they may be composed, without remainder, of actual and possible *æstheta*. What I am saying is (1) that an *epidoxaston* is not *an æstheton*. It cannot be inspected all at once, the whole of it, that is to say, or throughout its continuing existence. I am also averring (2) that without *some* actual *æstheton* there can never be sufficient evidence for an *epidoxaston's* existence. If these statements beg any questions at all, they beg very mildly and, so to say, apologetically. I should like, even, to include under what I call "requirement" the possibility of the theory that physical things (let us say) are known by a special sort of intellectual intuition, provided it be admitted that *this* species of noesis cannot be accepted as evidence of a thing's existence unless actual sensory stimulation of a relevant sort also occurs.

Using these terms, we may safely say, I think, that selves cannot be mere *noeta*, and may confidently expect them to be either *æstheta* or *epidoxasta*. And since *epidoxasta* require *æstheta* as a part of their evidential basis we must somewhere run upon the problem whether any *æstheta* have peculiar significance in this affair.

The solution usually proffered (at any rate until recently) is not doubtful. When we speak of *our* knowledge of *the* self (we are told) we ought to mean the knowledge which *each* of us has of *himself*. And each of us does have immediate acquaintance with a special set of *æstheta*, viz., his own private *introspecta*. These private *æstheta* are highly relevant to the analysis of self-cognition, and their existence explains incidentally why the acquaintance which *each* of us has with *himself* is so much more adequate than anyone's acquaintance with any other self.

I may call this opinion the theory of the private view, and I should like to say at once that, as it stands, it is quite inconclusive.

In fine, the simple circumstance that we do have a private view of certain *æstheta* would not prove that such private *æstheta* solve our problem. In saying this I am not forgetting that *all* *æstheta*, including all *sensa*, are probably private, for an important distinction would still remain between the privacy, say, of "my" organic *sensa*, such as toothache, and the privacy of "my" *reds* and *blues*. The latter at least have a sort of public message which the former do not have.

I am arguing instead, that logically I *might* have an exclusive private view of something not myself, and again that I myself *might* logically be the object of public inspection. This obvious consideration is quite sufficient to overthrow all theories based simply upon the private view.

We may, however, use this rejection of the private-view theory to further our own ends. As I suppose, any self must either be composed of or be capable of performing mental functions, and the theory of the private view is to be rejected, not merely on account of the logical omission already mentioned, but also (and chiefly) because there is no proper connection between performing mental functions and being privately observed. It is plain nonsense to say that a smell can know anything or will anything—even if smells are private. And a stomach ache—which is very private—cannot know or will either.

In short, the theory of the private view is a mere confusion, and the reason for the confusion, I think, is as follows. It is an undeniable empirical circumstance (and likely to be important) that *each* of us is acquainted with *himself* in a way in which none of us is acquainted with anyone else. Hence we falsely infer that privacy is the important matter when, in fact, the considerable question is whether anything (private or public) is capable of being part of a self or of performing mental functions.

What we have to ask, therefore, is whether any *æstheta* have this status or capacity, and it seems to me that certain *æstheta* may have them. For the events which Dr. Ward called "attention" (*i.e.*, judging, choosing, perceiving and the like) do seem to me to be *æstheta* and also to be not obviously incapable of the functions or status in question. It is nonsense to say that the *sensum* red is acquainted with anything, but it is not nonsense to say that "seeing" is acquainted with red. It is also nonsense to say that red is a part of a mind. If it were, minds would really be red. But it is not nonsense to say that "seeing" is a part of one's mind.

Contrary to an unfortunate usage, I propose, in the rest of this paper, to employ the term *introspecta* for this class of *æstheta* and for this class only (*i.e.*, for what Ward called "attention" and "feeling") and to assert that *introspecta*, so defined, are peculiarly relevant to our problem. (As it happens, these *introspecta* are very thoroughly private so far as empirical evidence goes.)

In opposition to this assertion it is contended, first, that there are no such entities as these alleged *introspecta*; secondly, that if there are such entities they are misdescribed when they are called *introspecta*; and, thirdly, that if they do exist they are, comparatively speaking, irrelevant to the analysis of self-cognition.

With regard to the first of these objections, I have to maintain that the quality of choosing, sensing or being pleased manifestly belongs to first-hand experience in a direct or immediate (not in a circuitous or inferential) way, and I do not think that I need to waste many words in defending what is really so very obvious. I am content, therefore, to say that the difference, *e.g.*, between judging and being pleased is as immediate, plain and first-hand as anything I can hope to dream of. In some sense, therefore, there *are* facts of the type alleged.

The second objection, of course, still remains, since the facts in question may not be introspecta in the sense defined because they may not be *æstheta* in the sense defined, that is, they may not be capable of being inspected. This view is very commonly held. We are told, for instance, that introspecta are enjoyed, not inspected, or something of the sort. Here, I think, I can also afford to be brief. I believe that I can and habitually do inspect such introspecta, but if inspection is the wrong word to use I do not greatly care, provided that it is admitted that we are somehow immediately acquainted with such introspecta.

Regarding the third objection, it seems foolish and even grotesque to maintain that feeling and attention are irrelevant to, or mere adjuncts of, our personal experience, and therefore I shall pause to explain one point only. I am not contending that if there were no such introspecta there could be absolutely no knowledge of the self. It is possible, I think, that we might apply an argument similar in its general terms to Kant's deduction of the synthetic unity of apperception. Thus, we might say that if successive facts are to be recognised as successive, they must be "held together" in the unity of a *single* cognitive process. Such cognitive processes, whether or not they are themselves successive, must at any rate be distinguished from the succession in the facts cognised. By some such path as this, selfhood, in a way, might be reached. At any rate, I am disposed to think Kant's "transcendental" ego much less of a fiction than either his "empirical" or his "nouïmenal" ego. I see no reason, however, for supposing that a self so reached is either mine or yours—unless, indeed, we know in advance that the *æstheta* united in this single process are themselves mine or yours.

To resume. A certain class of *æstheta*, to wit, introspecta (in our sense), are promising (or not unpromising) entities to

dwell upon. It is manifest, however, that the self, in any ordinary sense, cannot be an *æstheton*. For we ourselves are, at least intermittently, continuants. We are all able to know that we are the same selves as we were yesterday, even if, during the night, none of us was an ego at all. And we are never capable of inspecting our whole psychical lives all at once. What is more, apart from our continuance, it is unlikely that any of us can inspect *all* that he is at any particular moment. We may, indeed, always possess what I have called sub-reflexive acquaintance with our total psychic being (or what Mr. Broad has called indiscriminating self-awareness). This, however, is *not* full, or clear, or explicit, self-inspection. Indeed, it is rather a dim awareness that we are *more* than we can clearly perceive ourselves to be—"more" in a special way, to be sure, but still, in another way, *only* more.

Accordingly, it seems legitimate, and it is certainly plausible, to infer that we are (not *æstheta* but) *epidoxasta*, and that *introspecta* provide the element of *æsthesis* which is *required* for any justifiable belief in the existence of such *epidoxasta*. It is worth our while, I think, to proceed with this conjecture, but in order to do so (with the least hope of profit) it is necessary to investigate the possible relations between *æstheta* and *epidoxasta* more carefully than heretofore.

I have suggested that the "things" of common sense are instances of *epidoxasta*, and therefore must protect myself against the type of objector who always cries out that to treat the self as "a thing among other things" is to babble most mischievously. Let me say, then, in general, that "things" may differ from one another by the whole diameter of being and yet be "things," and that Locke, or Descartes, or the scholastics, when they held that selves were things as well as other things, never confused these "things" with the other things but drew, quite consistently, the most radical

distinctions. However, it is best to avoid needless causes of stumbling ; so I hasten to explain that I am not going to talk about other things at all but only about selves. I am about to consider the relation of *these* epidoxasta to *their* æstheta. For aught I know, the relation in this case may not run parallel to the relation between æstheta and epidoxasta in the case of physical things. But it is advisable, all the same, to consider, in general, the possible forms which any such relationship may logically assume.

So far as I am aware, there are four possible theories of the relation between epidoxasta and their relevant æstheta. These are, respectively, the constructional, the inferential, the ampliative, and the occasional theories. According to the constructional theory, an epidoxaston is a construction from certain æstheta. According to the inferential theory it is an inference from these. According to the ampliative theory, an epidoxaston is *composed* of æstheta (perhaps of actual and possible æstheta) but is more extensive than any group of relevant æstheta which we can summon before our minds either simultaneously or by successive acts of attention. The occasional theory, in opposition to all the others (unless, perhaps, to the first), maintains that an epidoxaston is known intellectually by a species of intuition, and is neither inferred from nor inclusive of æstheta—and yet that some æstheton is an indispensable occasion, or cue, for this intellectual process.

I have to confess that I do not understand the first of these theories and therefore dare not discuss it. I cannot discover from its exponents whether, when you have made your construction, you have arrived at fact or at fiction ; and this little point seems to me of some importance. I also find difficulty in understanding whether the constructional theory is or is not inimical to any or to all of the others. Therefore, with regret and a sincere apology, I am constrained to pass it by.

I must also, with an apology equally sincere, forbear to discuss the occasional theory. I do not see how an occasion can really be *required* and yet be *only* an occasion. *Æstheta* seem to be altogether too necessary for the truth of the theory. They are more than mere psychological cues; and therefore they should not be discarded in the end. Or so I think; and therefore I have to deal only with the inferential and the ampliative theories.

It is unlikely that the passage from *æstheta* to *epidoxasta* could ever be legitimately made without *some* inference. Consequently, if the inferential theory is truly distinctive, something more must be meant by it than the mere fact that inference somewhere occurs. The type of theory, then, which I have in mind passes inferentially from *æstheta* to something of which *æstheta* cannot even be constituents. In a word, it is quite definitely *metæsthetic*. Our question, therefore, is double. Are we entitled to make any such *metæsthetic* inference in the case of the ego? And do we *need* to make it?

We have no business, I think, to maintain that any such inference is necessarily absurd or the unnatural parturition of a "mere monster." Kant's unity of apperception, for instance, is an inference from *sensa* to something of a totally different order from *sensa*, and it would be valid if Kant were able to show that it supplied the only, or the best, explanation of the fact that the apprehension of *sensa* cannot conceivably be a function of *sensa* themselves.

The question is, therefore, whether we need to make a *metæsthetic* inference or whether we may be content with measures less heroic. In other words, we have to consider the sufficiency of the ampliative view.

The general tenour of the argument in this paper has shown the probability that the most promising form of the ampliative view in the case of the ego is somewhat as follows: *Each* man's

belief in the existence of *his* ego requires, and in a large part is based upon, his knowledge of certain *æstheta*, viz., introspecta, in the special sense of introspecta already indicated. What, then, is to prevent us from believing that these introspecta are the very stuff of any ego? In other words, why should we not believe that, error apart, introspecta actually observed as such, are literally and numerically identical with parts or phases of a self's existence, and that the parts or phases of ourselves which we do not explicitly notice are of the same order as the observed introspecta, consubstantial with them, members of the very continuum which, when we think of it, we call "I"?

Several reasons to the contrary, I know, have been alleged, and it is probable that I have not appreciated or even heard of a great many of them. I should like, however, to conclude this paper by referring to a few among those I have heard of.

It is stated (*e.g.*, by Dr. McTaggart) that theories of the ampliative type are but variations of Hume's untenable doctrine of the "bundle of perceptions" and should be left to the loneliness wherewith Hume felt himself affrighted. A sufficient reply to this objection, I think, is, first, that it is introspecta, not "perceptions" that are in question, and, secondly, that Hume's "perceptions" are such utterly "distinct existences" that they resist being bundled, even if (as he denied) there were any string to bundle them with. In the view I have stated, however, there is not the least occasion for maintaining that introspecta are atoms or "distinct existences" at all, except in the entirely inoffensive sense that they may be discriminated when they are noticed. They are discriminable phases of a continuum, not beads that require, but never receive, a uniting thread.

Again, it is objected that introspecta are "states" of the self, and that all "states" must be "owned." This objection

seems to depend upon the intrusion of legal views concerning property into what ought to be pure metaphysics. It may be sound law that a man "owns" both himself and his "states," but the important point, in the present connection, is that he *is* himself; and if these so-called "states" are phases or constituents of his *being*, we need not trouble about "ownership."

Furthermore, it is objected that introspecta, in the sense here in debate, are actions of the self, and that in every instance of actions *operari sequitur esse*. To this I reply that "substances" may be continua of events, not something underlying or underpropping events, and that until this view can be refuted the proposed objection falls.

To my mind, however, the most serious objection, and the one I have left to the last, is of a more empirical kind, and may be stated in two forms, the one rather moderate and the other quite extreme.

The more moderate form of this objection is to the following effect: An implicit assumption of the ampliative view is that introspecta are capable of performing mental functions. In fact, however, we have no better right to maintain that (say) "a" perceiving perceives than that "a" knocking knocks. There can be no perceiving unless "I" perceive or "you" perceive, although, in view of the evidence concerning fugues and dissociations and the various ways in which personal identity may be said to be a matter of degree, we cannot, perhaps, be entirely confident about the persistence of this "I" or this "you." In the more extreme forms of the theory these difficulties about persistence are shelved or ignored, and one and the same "I" is said to be present from the cradle (or before it) to the coffin (or after it) in every mental act.

If advocates of the ampliative view had necessarily to maintain that this or the other discriminable introspectum is capable by itself of doing the whole work of a psychic

continuum at the time at which the introspectum is noticed, I could not deny that this final objection would be so serious as to be conclusive, and so should be driven to accept the more moderate (although not the extreme) form of the objection. I do not think, however, that believers in the ampliative view need assert anything of the kind. All they need maintain is that introspecta are authentic selections from a psychic continuum, and that the rest of the continuum is not of a different order from the introspecta. They may even maintain consistently that any introspectum is immersed in a unity (very likely a profounder unity in certain important ways) of which there is always sub-reflexive awareness.

What they deny is that any *metæsthetic* ego must be supposed to underlie or to accompany introspecta, and that there is any *æsthetic* ego of a different order from introspecta constantly observable either for short periods or during a lifetime. I do not say that Hume or Bradley disproved the existence of an *æsthetic* (*i.e.*, a perceptible) ego of this constant sort. For both of them may have been looking in the wrong place. And so, of course, may the rest of us. If the right place, however, is in the neighbourhood of introspecta, I think we may conclude, with some confidence, that no *æsthetic* ego radically different from a unity of actual or possible introspecta is to be found, and that there is no constraining reason for believing in a *metæsthetic* one.

III. *By* ALAN DORWARD.

I ALSO write without having seen Mr. Dawes Hicks's paper ; but, with Mr. Laird's before me, I cannot complain of lack of matter for discussion. The field, indeed, is so rich that I must deliberately pass over some points. I shall, for instance, say nothing about the classification of objects into the classes of *æstheta*, *noeta* and *epidoxasta* ; because the criticisms which I feel inclined to make here are not, so far as I can see, of any importance in connection with our main subject.

As regard this main subject, the procedure which seems to me most convenient is as follows. The line of approach which commends itself to Mr. Laird is not quite the same as that which I should myself choose ; but the two lines naturally intersect at a good many points. I propose, therefore, to adopt that line of approach which seems to me most natural ; and at the various points where this line intersects the other, I shall be able to state my reasons for differing from Mr. Laird.

To begin with, I agree with him that our only access to the self is by means of our direct awareness of what he terms *introspecta*, which are mental events "thoroughly private so far as empirical evidence goes." The evidence for direct knowledge of other minds is so doubtful that we cannot depend on it in a case like the present ; so, if it were not for our acquaintance with *introspecta*, we should have no evidence that the world contained anything except physical things. The questions, therefore, whether we are acquainted with *introspecta*, and whether *introspecta* do display some characteristics not reducible to those found in the physical world, are of extreme importance.

Those questions are answered in the negative by the Behaviourists. But since there must be a limit to a symposium, and since Mr. Laird assumes without argument that these questions should be answered in the affirmative, and since I entirely agree with him in this, I propose to pass over this whole matter.

From this point, then, I shall assume that there are mental events, and that they are known by acquaintance. So far I am in complete agreement with Mr. Laird; but in the next stage of the argument I prefer to take a different line from that which he pursues. He sets out at once to ask "What are the possible theories of the relation between the self and introspecta?" He enumerates a number of such theories, and finally gives reasons for rejecting all except one.

Now it seems to me better not to introduce at this stage the notion of the self, as if it were a clearly defined concept. Everyone who accepts mental events accepts the existence of a self in some sense of the word. In the end the meaning which is given to the word depends entirely on the account of mental phenomena which commends itself to the person employing the word.

So I suggest that what we ought to do here is simply to look more closely at introspecta and the laws of their connections with one another. We shall, at the conclusion of our analysis, come upon some entity or group of entities to which it is convenient to attach the name "the Self"; and we may possibly be led to deny altogether the existence of some other entity, which is accepted by a rival theorist, and to which *he* attaches the name "the Self."

We have to consider then (a) the internal structure of a mental event, and (b) the kind of relations which relate mental events among themselves.

(a) It is convenient to distinguish two kinds of mental events, objective and non-objective. For the moment I do not wish to dwell on this distinction; I wish merely to select for analysis

a type of mental event which is clearly of the objective kind, viz., a case of acquaintance.

What do we know about a mental event of this kind? In the first place, we see that it must be complex, involving two terms and a relation, the mental relation of acquaintance. The object term will be an *æstheton* in Mr. Laird's sense; but it is the other term, which I shall call *S*, which demands our attention now.

When, in introspecting, we fix our attention on a case of acquaintance, it seems that we have much more difficulty in discriminating, within the complex event, this *S* than we have in discriminating the relation or the object term. It is on account of this fact (for it is a fact) that some have been led to deny altogether the existence of *S*, and have consequently been reduced to very strange shifts in their attempt to give an analysis of cognition; for, as Ward used to contend so emphatically, you cannot give any intelligible analysis if you work with objects alone. It appears that at this stage in the argument we can say nothing whatever about *S* except that it must be a particular existent; but it is important—indeed, it is essential—to recognize that we can say at least that.

It is very often held, however, that we can say of *S* that it is a "cognitive act." To the present writer, such a statement appears only to render the matter more obscure. The old criticism, that an act implies an agent, is perfectly sound. The believer in "acts" can only avoid it by pleading that we must not import into a metaphysical discussion the popular associations of a word. But if we leave out this part of the ordinary meaning of the word "act," it ceases to mean anything more than a mere "something." In other words, once the believer in cognitive acts admits that the word "act" is not to be taken in its ordinary sense, his "cognitive act" becomes only a "cognitive something." If we then proceed to ask "Why cognitive?" the only reply is that it is the subject in a cognitive

event. But to say this is to say nothing more than that there is a something which cognizes, when a cognitive event is in question. And that is precisely the conclusion which we had reached at the end of last paragraph, without introducing the notion of an "act" at all.

(b) With regard to the relations of mental events to one another, our datum is that mental events are not found lying about separately, but connected in what I shall, for the sake of convenience, call "biographies."

All mental events appear to be connected in this way. In addition there is, in the case of self-conscious beings, the peculiarity that every now and then there occurs a mental event which claims a specific kinship with others belonging to the same biography; this occurs whenever there is a mental event which is expressed in a sentence containing the pronoun "I."

This is the datum of our enquiry. The analysis must bring out those relations which unite any mental event to others belonging to the same biography; and which do not hold between it and events belonging to a different biography.

My contention is that the relation in question is a very simple one, and that it consists merely in this: that S is a constituent of all mental events belonging to the same biography. Suppose, for instance, that I hear a noise, am simultaneously annoyed by it, and consequently decide to go out and see if I can put a stop to it: then it is S which hears the noise and is annoyed: and it is the same S which a few moments later decides that steps must be taken in the matter.

There are as many S's in the universe as there are biographies, and a mental event belongs to a certain biography if it has the appropriate S as a constituent.

Regarding the nature of self-consciousness, we have already admitted that acquaintance with introspecta is a fact. On

the view which I am defending, this means that S can be acquainted with the event "S is acquainted with O." There is a certain difficulty here about simultaneity; but this, it seems to me, can be overcome if we admit the notion of the specious present. First, we have the event "S acquainted with O"; then, after this event (but before it is past), we have the event "S acquainted with the event 'S acquainted with O.'"

I am afraid that to many people this view—that a biography is constituted by the presence in each of its events of an identical and persistent S—will seem a very simple-minded, not to say old-fashioned, one. But I should like to ask, what other accounts are offered? For I have myself never been able to find one which really faces the questions at issue.

To take first one of those points at which Mr. Laird's line of enquiry crosses my own, I cannot see that he ever enters on the question of the analysis of a *single* mental event. He is content to take each introspectum as a unit, and to consider only its relation to the Self; but, if my contention can be sustained, an introspectum is a complex demanding analysis. And as regards the relation which a mental event *has* to any other within the same biography, and which it *has not* to any mental event within a different biography, I cannot see that he tells us anything at all. He says only that introspecta are "discriminable phases of a continuum." But everyone admits that in some sense a biography is a continuum. The whole point is, what relations hold between two members of the same continuum which do not hold between a member of one continuum and a member of another continuum?

I have said that this point has never been really faced by anyone; but to say so much is really to go too far. It has been faced by Dr. Broad, who has worked out (although he does not himself accept it) the theory which I am advocating with much greater thoroughness than I have attempted and much greater

lucidity than I could achieve. Only, in order to provide a substitute for this view, Dr. Broad has been compelled to propose an entirely new concept of "Mental Position." I have no doubt that Dr. Broad's construction is logically adequate: I only ask those who reject my view whether they are prepared to accept instead a number of quite new unanalysable concepts. If they are not so prepared, they have yet to provide a satisfactory analysis of the unity of a biography.

It will no doubt be clear at this stage, if not before, that the simple-minded view which I am putting forward is that which is often called the Pure Ego theory. I have no objection to this name so long as it is regarded only as a convenient label. I do think that what I call S is exactly what the unsophisticated person calls the "Self." But if anyone insists on calling my S the "Pure Ego," I must protest that it is not "pure" if that implies a virginal detachment from all experience; for, so far as that goes, *this* Ego is as much empirical as pure.

I can make this clearer, perhaps, if I again relate my own view to Mr. Laird's. The entity to which I find it convenient to attach the label "the Self" is not any one of Mr. Laird's possible Selves; it appears to fall altogether outside of his classification. It is, however, an *epidoxaston* in Mr. Laird's sense, since it does not reveal itself fully in a momentary acquaintance. It is *not* *metæsthetic*, because it is directly known, though with two limitations: (a) as being an *epidoxaston*, (b) as being only known as one term in a complex and discriminated with difficulty.

So far the account of S which I have given lays me open to all the most deadly objections to the Pure Ego theory. It has always been contended that such an Ego is only a mathematical point, a mere "something" without qualities.

I admit that the S which I have described is, so far, no more; but I have insisted that even so much is something. I now proceed to say that there is more.

Once again, I find a convenient starting-point in some *dicta* of Mr. Laird's: "It is plain nonsense to say that a smell can know anything or will anything" and "It is nonsense to say that the *sensum red* is acquainted with anything."

I am inclined to agree with those *dicta*, but I should like to ask, why are they self-evident? Why is it clear that a smell or a colour might not be S in some mental event? And it seems to me that the reason why Mr. Laird rules out those things is not because they *are* smells or colours, but because they *are not* something else. To come at once to the point, I suggest that there is a general proposition:

"If R is a mental relation, all terms in the domain of R must possess a quality P," which is implicitly accepted by everyone who asserts that a smell or a colour or a sound can't perceive or feel or desire. This quality P would, I imagine, commonly be called "being conscious," "being a mind," "being psychical," or some such phrase.

I think that this proposition would be accepted by anyone who says what Mr. Laird says: not in the sense that they must accept the general proposition before accepting the particular one, but in the sense that, being convinced of the truth of the particular, they cannot stop short of accepting the general.

If this proposition is self-evident (as to which I am not myself at all clear), then we can be sure that S has the quality P, which it seems most convenient to call "being psychical." This quality seems to me quite certainly indefinable; in any case, the interesting point is whether it is incompatible with certain other qualities.

If my suggestions are correct, Mr. Laird is really asserting two things: (a) that the above proposition is true, (b) that to be a smell or a colour is incompatible with being psychical. And, as I say, it is this latter point about incompatibility which is the more interesting.

Putting aside the fascinating multiplicity of logical hypotheses, it really comes down to this: Is the brain the mind? Or, in my own drier terminology: Is S simply the brain? All discussion on this point can be divided under two heads:

(1) Is being extended incompatible with being psychical? Descartes answered this question in the affirmative, Locke in the negative. Anyone who agrees with Descartes will be quite clear that the Self is not the brain.

(2) But even if one is not clear that matter can't think, there are complications. In this case, the brain might (*à priori*) be the mind; that is to say, the thing is not logically impossible. Only, in such a case, we must be careful about our terminology. If we say "the brain is the subject in all mental events," it is clear that by "the brain" we must mean, not merely the physical thing which anatomists can dissect, but "a thing which possesses the physical qualities described by anatomists and also the quality of being psychical."

As I have said, this seems to me quite possible logically; the brain (as above defined) may be S. But this seems to me rather improbable on empirical grounds, since the mind can apparently work when some part of the brain is put out of action.

This is a weak and inconclusive ending to my contribution; but I cannot feel that up to the present moment any philosophical contribution on this question has a right to be either strong or conclusive.



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